# The Technology Review

Vol. XIII

JUNE, 1911

No. 6

# TWO AND A HALF MILLIONS FOR TECH

Large benefactions closely follow the signing of the Institute's Bill by Governor Foss—A considerable amount available for scholarships only

The wonderful unfolding of the Institute of Technology which has been going on for the past two or three years reached a climax last month when within a period of a week, announcements of new sources of income were made which roughly aggregate two and a half million dollars.

The signing of the bill by Governor Foss, granting the Institute \$100,000 a year for ten years is the most important of these developments because this money will provide for the running expenses of the Institute and will allow the gifts of alumni to be devoted to buildings and other specific purposes. It means that when the committee to be appointed by the Alumni Association asks for a general alumni subscription for the New Technology, it will be devoted to perhaps a Rogers Adminstration Building, or some such purpose, and under the changed conditions it is estimated that such a fund will double or even treble the income fund which amounted to nearly a quarter of a million dollars and which was raised at a time when conditions were far less promising than at present. It is also to be remembered that the number of alumni has been very materially increased since that time.

The next important announcement was a gift of half a million dollars from T. Coleman duPont, '84, a life member of the Corporation of the Institute. This money is to be used in buying land for a new site and was in a large measure conditional on securing the State grant. There are other conditions attached to this gift but they are of such a nature that the Corporation is confident that they can be easily complied with. One of the stipulations is that a certain amount of land is to be secured for a site in a locality approved of by him, which must be as convenient as possible to Copley Square. This gift providing for the site, practically settles the last determining item in regard to the future policy of the Institute, and with maintenance for ten years assured, and a site for the new buildings provided, it is expected that generous gifts from friends of the Institute will be forthcoming for the erection of new buildings.

The will of Mrs. Rogers provides that the residue of her estate after paying certain legacies to relatives, shall revert to the Institute. The newspapers state that this amount will approximate

\$500,000.

# technology review

Published by MIT

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The Institute will also receive from the estate of the late Francis B. Greene the sum of about \$600,000, from a trust fund created five years ago and which was only recently made known to Institute officials. The income from this fund is to be used entirely for scholarships and it will, therefore, not be of material assistance in erecting buildings on the new site.

Announcement of these large gifts may make it look as if the Institute would need little additional help, but the situation is far different. Mr. duPont's offer—should the conditions be fulfilled, as they undoubtedly will be—goes toward buying a site and developing the new school plant, so that it will be used up before long. The Greene fund will be devoted to helping students, so that money may not be used either for new buildings or endowment.

Mrs. Rogers's bequest, however, which is understood to be without conditions, may be used, if this is true, in any way that the trustees see fit. The State's aid has a string, in that it provides that eighty scholarships must be maintained

in return.

As the tuition is \$250 a year, this means that \$20,000 out of each year's \$100,000 is to go to helping students in this way. Furthermore, it is pointed out that as the average cost to the Institute for each student is about \$470 a year and the tuition charge covers little more than one half of that amount, the school is losing annually \$220 on each student. So that when the State and the other scholarships are reckoned all together it will practically use up all of the \$100,000 yearly. The Greene fund should yield about \$25,000, and other scholarships, not reckoning the Commonwealth's, yield \$35,000.

The school's present endowment funds total about \$2,500,000 and of this more than \$500,000 is tied up for scholarships, leaving the net income-bearing endowment funds which may be devoted to general purposes in the neighborhood of \$2,000,000. If the school is to be well fitted to carry on its work when the State aid ceases, in ten years, as it has agreed, then at least \$2,000,000 more should be

added to the endowment to give an equivalent in income.

When it is considered that to erect the new buildings as planned will cost at least \$2,000,000 above the land then the size of the task which the officers of the Institute and the alumni and their friends have set before them is apparent. is expected that when a campaign to secure the amount needed to cover all of these things and to develop the great field which is now open to Technology, not less than \$5,000,000 will be found necessary. What is wanted is bequests or gifts in other forms without conditions attached, although all help is welcome and the money will be expended with the greatest care.

The question naturally arises, why does not the Institute sell its property on Boylston street and Trinity Place and use the money for the building fund. As a matter of fact the restrictions on the Boylston street property are such that a sale at the present time would bring but a small portion of its value. Trade is rapidly encroaching on the residence portion of the Back Bay near the Institute, and undoubtedly the time will come in the near future when the abutters on Newbury street will find it to their advantage to release the Institute from the restriction allowing it to build over one-third of the property only. will make the Boylston street property extremely valuable.

The development of the railroad land, the building of the new Copley-Plaza Hotel and the extension and widening of Stewart street which will pass through the Institute buildings on Trinity Place, will increase the value of the property

there greatly.

It thus becomes evident that the buildings we are about to erect will have to be built with new money. The Corporation faces this condition with confidence and with the full knowledge that the alumni will be of invaluable assistance in raising this money. The land will probably not be sold until after the new buildings have been erected. It is estimated that the proceeds should amount to approximately \$3,000,000,

which will be available for endowment. The interest on this amount will make up for the loss of the State grant of \$100,000 a year when the ten-year period has elapsed.

# T. C. duPont, '84, gives \$500,000

One of the most important gifts that the Institute has ever received has just been made by T. Coleman duPont, '84, of Wilmington, Del. The amount is \$500,000 and is to be used to purchase a suitable site for the Institute, the location and area to be sufficiently generous in extent to satisfy the donor who as the head of the duPont Powder Company, a life member of the Corporation of the Institute, and a most interested alumnus of Technology, is eminently qualified to pass judgment upon such a matter.

After leaving the Institute, Mr. duPont entered practical work with the Louisville and Southern Exposition, and later, with the Central Coal and Iron Company. He was general manager of the Johnson Company, Johnstown, Pa., in 1893; he has engaged extensively in coal and iron mining in Kentucky and also in construction and management of street railways. He removed to Wilmington in 1900, and since 1902 has been president of the E. I. duPont de Nemours Powder Company; he is president of the Central Coal & Iron Company, McHenry Coal Company, and Min Jelico Mountain Coal Company, all of Kentucky, and of the Johnstown (Pa.) Passenger Railway Company, and the Wilmington Trust Company. He is also director of the Union National Bank of Wilmington. He became a member of the Republican national committee in 1908 and for some years was chairman of the Republican state committee of Delaware.

He is a member of the American Society of Mechanical Engineers, Engineering Association of the South, American Academy of Political and Social Science, Engineers' and Architects' Club, American Society of Mining Engineers; also of the Rittenhouse Club, Southern Club of Philadelphia, Metropolitan Club of Washington; Metropolitan, Lawyers', Manhattan, and New York Yacht Clubs of New York; the Wilmington Club and the Wilmington Country Club of Wilmington, Del.

# Death of Mrs. Rogers

Mrs. Emma Rogers, widow of William Barton Rogers, founder of the Massachusetts Institute of Technology, died at her residence, 117 Marlborough street, Boston, May 18, at the age of 87 years, after an illness of a few days.

The loss to the Institute is a serious one as it not only deprives Technology of its best friend, but also shatters the last link that bound us to the early days

of its history.

Mrs. Rogers' connection with the Institute covered a period of more than half a century, antedating the establishment of the institution itself, as it began during the time when Professor Rogers was elaborating his plans and seeking aid in carrying them out. Her relation has been that of a proud and indulgent mother whose life was that of the Institute itself. The July Technology Review will contain a sketch of her life and a tribute to her memory.

# Tech Gets \$600,000

A legacy probably approximating \$600,000 is to come to the Institute of Technology from a trust fund created by the late Francis B. Greene of New Bedford. Mr. Greene was a retired Boston lawyer who died in Florence, Italy, early this year. He was the son of the late David R. Greene, a wealthy whaling merchant of New Bedford. He was graduated from Harvard in the class of 1865, and soon after married Miss Rebecca A. Brown. As it is stipulated that the income alone shall be used and that only for aiding deserving students at the Institute, this gift will not be of assistance to the Corporation in the erection of new Institute buildings. It will, however, allow generous provision for a class of men who have reflected much credit upon the Institute.

# Bacteriological Research

The B. F. Keith Company of Boston, wholesale dealers in eggs, were recently sued by the government on the ground that the product they were marketing was unwholesome. Experts connected with the Institute of Technology satisfied themselves that the eggs were not unwholesome and believing that the discrimination of the government department of chemistry was entirely technical and unjust, gave such overwhelming testimony to support their belief, that the government suit was lost. very interesting facts were brought out by the Institute experts, and the B. F. Keith Company, desiring to go into the matter further, have donated to the Institute a fund of \$5,000 for a bacterial and chemical investigation of eggs under varying market conditions, with a view to determining their general wholesomeness. The letter of the company to President Maclaurin is as follows:

We are interested commercially and otherwise in the production, transportation and conservation of eggs and egg products, and having recently been drawn into a controversy involving important questions concerning the decomposition and wholesomeness, and especially the bacterial and chemical contents and changes of eggs and egg products under various conditions, we are desirous of having those and related questions investigated in the most scientific, thorough

and impartial manner possible.

For an investigation of this kind we naturally turn to the Massachusetts Institute of Technology, and if agreeable to you we shall be glad to guarantee to the sanitary research laboratories of the department of biology and public health a contribution of \$5,000 towards the expenses of such an investigation. The sole condition is to be that whatever results may be obtained shall be promptly published and in a manner calculated to secure their wide dissemination. Our objects in aiding an investigation of this kind are (1) to establish a sound and scientific basis for the industry in which we are engaged, and (2) to solve, if possible, certain problems relating to egg supply and the public health which have gradually arisen in connection with the growth of population in the United States, improvements in methods of transportation and conservation of foods and the administration of the pure food laws.

# An Impressive Showing

One of the most interesting features of the May Review was the impressiveness of the showing made by the various local alumni associations. The enthusiasm of the Technology clubs throughout the country, of which more than twenty-five held celebrations in connection with the Congress of Technology, was inspiring, but what would it have been if the announcement of gifts amounting to two and a half million dollars lately made, could have been given out at that time? The strength of the local associations is due largely to the secretaries, to whom hearty congratulations are extended. Nearly two pages of telegrams which were read at the banquet that night showed that the whole country is alive to the possibilities for Technology in the future.

In this connection, credit should be given to the committee on local associations, consisting of Lawrence Allen, '07, Hollis Godfrey, '98, and A. W. Rowe, '01, for their important work in connection with these meetings. Mr. Godfrey's articles on the Congress of Technology which appeared in the Sunday papers all over the country April 9, were of a character to call attention to the dignity and importance of the Institute at the end of half a century of existence.

Profs. W. T. Sedgwick and A. A. Noyes of M. I. T., have been accorded the honor of election to membership in the American Philosophical Society. This institution whose official title notes that it is "held at Philadelphia for promoting useful knowledge," is the oldest scientific association in the country and the conferring of membership is a special distinction. The additions to membership each year are limited among Americans to fifteen.

### POLITICS AS A SCIENCE

The story of the successful campaign for State grant—Institute's cause receives friendly assistance from many sources

When the Corporation of the Institute finally decided on the necessity of asking the State for the sum of \$100,000 a year for ten years, a committee was appointed from the corporation consisting of Messrs. Livermore, Peabody, Tuttle and F. W. Rollins.

At the request of the Corporation, an alumni committee was appointed with the following members; Messrs. J. W, Rollins, Jr., '78, chairman: H. W. Tyler. '84, secretary; E. C. Hultman, '96, I.W. Litchfield, '85, F. T. Miller, '95, A. F. Bemis, '93, J. A. Curtin, '92, F. W. Hobbs, '89, F. L. Locke, '86, A. A. Noyes, '86, H. A. Morss, '93, M. E. Pierce, '96, Jasper Whiting, '89, the first five constituting the executive committee.

In October, after this committee was appointed, a joint meeting of the Corporation and alumni committees was held and a general plan of action decided upon. The alumni committee thereupon took up the active campaign holding weekly and often daily meetings until the bill was finally signed on May 20.

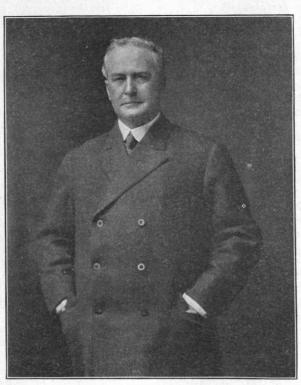
The history of the campaign is one involving the pure science of political research with the application of the results to practical politics in an entirely legitimate way. It is unnecessary to speak in detail of the work of the committee, other than to say that while the

brunt of the burden devolved upon a few individuals, the coöperation that developed was marvelous and most effective. Immediate assistance came not only from nearly every alumnus in Massachusetts, but from a large number of alumni in other states as well.

Most impressive of all was the handsome treatment by the public citizens of Boston, not intimately connected with the Institute and many of them graduates of other colleges. From every

other direction, the Institute bill has generally had the heartiest support, perhaps the most striking exhibitions being at the hearings before the committee on education and the committee on ways and means which have been fully reported in these columns.

For the effectiveness of this campaign



J. W. Rollins, Jr., '78; Chairman of the Committee on State Aid

we have to thank principally the President of the Institute on whom the most difficult and trying features of the work have fallen. In hardly less degree, the chairman of the committee on State aid, J. W. Rollins, Jr. '78, and the secretary, H. W. Tyler, '84.

The thanks of the alumni are also due to a number of other men who have devotedly given their attention to the furtherance of this bill regardless of their own business affairs and whose efforts have had telling effect. Chief among these are E. C. Hultman, '96, and R. N. Turner, '05, whose aid was invaluable.

The campaign has been principally one of education and in connection with this work, the Congress of Technology, coming as it did just before the bill went to the governor, was of the greatest value.

The lesson presented is one that can be immediately applied to the greater work before us, that of raising large sums of money for the New Technology from the alumni and every public-spirited citizen.

On Saturday, May 20, Governor Foss approved the resolve granting \$100,-000 a year from the State to the Institute of Technology for a period of ten years.

The importance of this action on the future of the Institute cannot be overestimated. It provides for all the running expenses of the Institute during a period of ten years, thus relieving the alumni of any responsibility in that direction and allowing them to take a direct and intimate part in the building of the New

Technology.

The news of the signing of the bill was received with satisfaction everywhere. Although it cannot be said that the principle involved was generally indorsed, objections were not advanced by the newspapers or representative interests, because of the general understanding that this appropriation was of vital significance to the Institute. The newspapers were most generous in their support of the bill. Some of them frankly stated that they did not approve of the principle, but because of the circumstances, and particularly in view of the community's great interest in the

maintenance of the Institute's excellent work, the governor was urged to sign the resolve.

The original bill as presented to the legislature was as follows: "Resolved, that there shall be paid annually, for the term of ten years, from the treasury of the Commonwealth to the Massachusetts Institute of Technology, the sum of one hundred thousand dollars, to be so paid and allowed from the first day of January in the year nineteen hundred and twelve, to be expended under the direction of the Corporation of the said Institute for the general purposes of the said Institute."

It was amended in the senate by providing for eighty free scholarships, applications for such scholarships to be made to the State Board of Education before July first in each year, with the approval in writing of the senator from the district in which the candidate resides.

The bill was further amended by the house committee on ways and means as follows: "Provided, however, that the payment for 1917 and for the four following years shall be conditioned upon the presentation of satisfactory evidence to the governor and council that the said Massachusetts Institute of Technology has received by bequest or gift from other sources, the sum of one million dollars in addition to all funds held by it on the day of the approval of this resolve."

The bill reached the governor on the afternoon of May 15, and he devoted a large portion of the week to conferences with men interested in it. He was opposed to the principle of State aid and on that account he was strongly tempted to veto it, it being stated that his idea was, that State aid should cease at a certain period in the history of any institution unless the State decides to assume control.

The pivotal importance of the grant, to the Institute, however, certainly had a very strong effect, especially in connection with the assurances given by a number of members of the Corporation that in their opinion, the Institute would never again come to the State for assistance. In signing the resolve, the governor issued the following statement through his secretary, D. M. Holman:

"This bill raises the question of the relation of the State to institutions of higher education. The general policy of making grants to private institutions cannot be approved. This grant to the Institute of Technology can be approved because the institution has always stood in a peculiar relation to the Common-



H. W. Tyler, '84, Secretary of the Committee on State Aid

wealth and, therefore, the grant is not a precedent for similar action in the case of other institutions.

"The grant does, however, raise the question of the future relations of the State to the Institute of Technology. Governor Foss believes that even in the case of the Institute of Technology State aid should ultimately cease unless the State takes over the management of the institution. The present time is not an opportune one for the determination of this question, because the Institute is now facing the serious question of removal

to a new site, and because its appeal to the public for funds may ultimately make it independent of State aid.

"Governor Foss believes that the State may safely aid the Institute to remove to a new situation, and that by the present grant the institution may be enabled to place itself in such a position that it will be independent of State aid. He feels, however, that the present grant is justified only by the emergency, and that it should be the last unless the State is to assume control.

"In this conclusion he finds that he is confirmed by the President and the other members of the Corporation of the Institute of Technology. President Maclaurin has written the following letter which fully covers the subject:

"In reply to your inquiries with reference to the proposed grant to the Massachusetts Institute of Technology for the next ten years, I have to say that, in my judgment, such a grant ought not to be continued indefinitely. I believe that at the end of ten years the Institute should be entirely free from the necessity of looking to the State for such support."

"President Lowell of Harvard, a member of the Technology Corporation, writes as follows:

"'Disbelieving in the general policy of grants by the State to support private educational or other charitable institutions, I feel that the grants to the Institute of Technology ought not to go on indefinitely, but that at the end of these ten years the grants ought to cease absolutely, or the Institute ought to pass into state control."

The entire campaign for the State grant from its inception has been ably handled by the committee on State aid of which J. W. Rollins, Jr., '78, was chairman, and H. W. Tyler, '84, was secretary. That the scientific method can be applied to politics as well as engineering, has been clearly demonstrated by the successful efforts of this committee.

At the annual initiation of Tufts College chapter, Phi Beta Kappa, Prof. Arlo Bates of the Institute, contributed the poem.

# The Tech Lobby

Talk about amateurs in the lobby, the Tech people have put the finest machine into the legislature which has been seen this year. The Tech men in charge of the campaign to get \$1,000,000 out of the State went right to the roots of things. They started a big card index with the name of every legislator on it and his pedigree. On these same cards they had written down the names of his father, brothers, sisters, cousins and aunts, and in any case where there was any affiliation with Tech it was carefully noted.

Then the sounding began. Every past member of the legislature, who had been a Tech man or who had got a Tech scholarship for anyone, was pulled into line and given a certain block of men to look after with an obligation to make deily reports in writing

daily reports in writing.

As a result, almost before the legislature opened, the Tech men knew exactly who were with them, what strings were holding them, and more important, who

were against them and why.

Ignoring for the time being, the fish they had captured, they started after those in the pool. These were followed on all possible lines. One man was reached through his brother-in-law who worked under a Tech man in a certain business. Another man was reached on the grounds that an older brother had years before taken the Tech examinations, though he did not matriculate. It has been a smooth business all the time.

The result is that they are approaching the climax without any fear, and even if Governor Foss should stir up they are ready to meet that situation. Talk about business in politics or business methods in legislation, these gentlemen have put in operation a system that would be worth hundreds of thousands of dollars to the big corporations who have to do with legislation. It is true, of course, that this has been a thing on which lobbying could be done right and left without fear of very harsh criticism, but the methods of keeping track of what has been done could easily be turned into other channels provided the card index could be kept in a safe where no prying eyes other than those so entitled could look it over.

—Practical Politics, April 15.

# Congress of Technology Publication

There have been so many inquiries about the publication of the papers read at the Congress of Technology that a tentative arrangement has been made with the McGraw-Hill Book Company of New York City to put these papers into a volume if there appears to be sufficient interest to warrant them in undertaking the enterprise.

This volume will include papers and abstracts of the six sections of the recent Congress, somewhat condensed and arranged for the greatest usefulness as a reference book. It will be well printed, in standard 6x9-inch size, bound in suitable cloth binding and contain approx-

imately 500 pages.

The purposes of the book are twofold: First the preservation in permanent form of the immense amount of exceptionally important material which the papers contained; second, a suitable record of an event of interest to every former

student of M. I. T.

In order that the publishers may determine something about the demand for the book, a thousand letters have been sent to former students of the Institute, entirely at random, and it is very likely that many men who would like to receive this book have not had a copy of this letter. It will assist the publishers and will be more likely to insure the carrying out of the enterprise if those desiring a copy will write to Walter B. Snow, '82, 170 Summer Street, Boston. The book will be issued in cloth at \$3.00 net, per copy. Orders in advance of publication will be accepted at \$2.50 prepaid.

# A Profitable Series of Lectures

E. B. Raymond, '90, second vice president, and chairman of the board of managers of the Pittsburg Plate Glass Co., will lecture before the students of the School of Engineering of the University of Pittsburg on the relation of the manager to the engineering graduate.

### NO DISTINCTION IN MEMBERSHIP

Alumni Association votes to welcome all former students as full members—An appreciation of Mrs. Rogers by Professor Sedgwick

At the last meeting of the Alumni Council, which was held at the University Club, May 22, Professor Sedgwick, who was present by invitation, spoke at some length of the life and character of Mrs. Rogers whose death has severed the last link which connected us with the original founder, through her devoted interest in the Institute.

Professor and Mrs. Sedgwick were intimately acquainted with Mrs. Rogers, spending several summers with her at her Newport home, where Professor Sedgwick assisted her in editing the Life and Letters of William Barton Rogers. The speaker referred to the happy circumstance that brought together Professor Rogers and Miss Savage, of their eminent fitness for each other, and of the influences that brought Professor Rogers, then connected with the faculty of the University of Virginia, to Boston, where he developed his great life work. He referred to Mrs. Rogers as in a sense the maker of the Institute and hoped that in some way, in some place, her devotion to Technology would be sometime elaborated.

The story of their life in the South and the cause of their removal to Boston was told with many interesting side lights which for personal reasons were not included in the Life and Letters of William Barton Rogers. The speaker said that to know Mrs. Rogers was a liberal education. She was interested and well versed in matters of music and art and was further endowed with a scientific mind absorbing much of the fire of Professor Rogers along the lines of work in which he was most interested. Like Professor Rogers she lived and died for the Institute of Technology. lowed it with fostering love from the very beginning up to almost her dying hour with an eye single to its glory. She knew no divided allegiance. Although the material interests in which she was interested were very wide—being engaged in unnumbered charities, a most welcome guest and queenly hostess, intensely interested in all the world's activitiesthrough all and above all, her first thought was for the school which her husband had conceived and founded. "It is a great thing," said Professor Sedgwick, "to have the life and interest of the founder of the Institute kept alive in this wonderful way by this wonderful woman. If prejudiced in favor of the Institute, it was the prejudice of a mother toward her child. The memory of her interest and affection, her kindness and gentleness, and her abiding faith in the cause of her devotion, is an endowment which will remain with us and which should be passed on to our successors as a precious heritage."

Following Professor Sedgwick's remarks Doctor Noyes, president of the association, asked the members to rise and drink a silent toast to the memory of Mrs. Rogers.

Alumni Dues and Subscriptions to Review Separated

In order to comply with a ruling of the Post Office Department it became necessary to separate the subscription to the Review from the dues of the association. The matter was discussed at a previous meeting of the Council and it was decided to change the by-laws in accordance with the necessities of the case. The changes proposed were printed in the March number of the Review, and more than a month having elapsed since publication, the Council voted to adopt the new by-laws which are as follows:

### ARTICLE VI

Section 1. The annual dues for all except honorary members shall be one

dollar and with subscription to The Technology Review, two dollars.

### ARTICLE VII

Section 1. The Technology Review shall be the official organ of this Association and its editorial management and publication shall be vested in the Council.

Sect. 2. Members not in arrears shall be entitled to receive all publications of the Association except The Technology Review to which they may subscribe at

the rate of one dollar per year.

The dues of the association will be one dollar a year, and subscription to the Review in connection with the payment of dues, will be one dollar a year. Remittances can be made at the same time by one check if desired. Price of The Technology Review to nonmembers and those whose dues are in arrears will be one dollar and a half a year.

ASSOCIATE MEMBERSHIP ABOLISHED

The proposition to abolish associate membership and give non-graduates elected to membership, the same privileges as graduates, thus making no distinction in membership, was discussed at two previous meetings of the Association and balloted on by the members. Secretary Humphreys announced that 726 members had voted in favor of the amendment covering this change and 60 had voted against it. This vote also carried with it the privilege of former students of the School of Mechanic Arts to become members of the Alumni Association upon election by the executive committee.

The present associate members of the Alumni Association will be elected to membership by the executive committee. Former students desiring to become members should make application to Walter Humphreys, secretary.

A pop concert committee consisting of George B. Glidden, '93, chairman, A. P. Underhill, '96, and A. W. Rowe, '01, was appointed by President Noyes.

Franklin W. Hobbs, '89, has found it necessary, because of press of work to resign from the vice-presidency of the Association. James W. Rollins, Jr., '78,

was elected vice-president to succeed Mr. Hobbs.

The resignation of Mr. Rollins from the nominating committee left a vacancy in that important body which was filled by the election of Edwin S. Webster, '88.

J.W. Rollins, Jr. '78, chairman of the committee which has just closed its successful campaign for a State grant of \$100,000 a year, made a report for the committee. He said that the success of the campaign was due to the united efforts and loval support of Tech men everywhere. The Institute had a good cause, and was justified in asking for \$100,000 a year and it never let up until the grant had been made. The committee was very much gratified to see the strong evidence of appreciation and esteem among men outside the Institute ranks. He referred to the untiring and effective work of President Maclaurin on whom the heavy responsibility of the campaign had fallen and whose faith had been a great factor in carrying the measure through. Mr. Rollins spoke with gratitude of the devoted and intelligent work of the secretary, H. W. Tyler, '84, and of E. C. Hultman, '96, as well as the very important assistance rendered by R. N. Turner, '05. One reason the bill went through was it had to go through. It was a serious matter for Technology and without this grant, all of our future plans would have been terribly handicapped. Mr. Rollins said that he believed that when the Technology fund committee starts to raise money for the New Technology, it will find the same loyalty, enthusiasm and hearty support that the committee on State aid had received from the alumni.

Doctor Maclaurin was next introduced and after congratulating the committee on State aid for their telling and successful work he told about the status of the site problem, essentially as reported in another column of this issue. He stated that the result of the campaign for State aid should show us that we ought not to be afraid to ask for big things.

Secretary Humphreys announced that the Alumni Association of Los Angeles had appointed John C. Chase, '74, as its representative on the Alumni Council.

# ALL ABOUT SITES

Writer in the Boston Transcript tells what he has heard about the problem of a new location for the Institute

The following article which we reprint from the Boston Transcript, May 23, probably gives a fairly good idea of the status of the site problem at the present time. There will be a meeting of the Corporation, June 2, and it is understood that this question will come up at that time with the hope that a selection may be made. The article is as follows:

The trustees of the Massachusetts Institute of Technology have four sites under consideration for each of which considerable favor is shown. They are as follows: In the Fenway, a large strip at the corner of Longwood avenue and Avenue Louis Pasteur, opposite one side of the Harvard Medical School grounds and conveniently near other educational institutions, the Art Museum, hospitals, and where the Young Men's Christian Association building is to be located: on the Charles River Basin at the corner of the Esplanade and Massachusetts avenue, opposite Riverbank Court, between the Harvard and Cambridge bridges; the Allston Golf Club grounds, between Commonwealth avenue and the Boston & Albany Railroad in Allston, and a tract of land bordering Jamaicaway and near Jamaica Pond, between Lochstead avenue and Castleton streets, extending up the hill to Centre street and South Huntington avenue.

There are fifty-five trustees of the Institute and they are pretty evenly divided over the good points of these sites. The division, in fact, is so close that it was said by a man who is thoroughly in touch with the facts, very recently, that should a vote be taken now it is likely that no decision would be reached. It is hoped, however, that within a few days things will come up which will clear the difficulties which have arisen because of land owners being over-greedy in some instances. One of the sites involved

deals with a considerable number of people and it is thought that they will try to get so much that they will kill the goose that lays the golden egg, so to speak. Another is almost as difficult to negotiate involving various obstacles from the real estate end. As to accessibility, three sites are about equally advantageous.

While the trustees will not be likely to haggle over a small premuim above what the land may actually be worth, it is sure that they will not consent to be "held up" for any greatly increased price asked solely because they want the tract: the sites are too evenly favored for that. With regard to some of the sites mentioned, options on at least parts of the land are said to have been secured. Some twenty other locations have been under consideration but have been practically abandoned as incapable of being adapted to the school's uses. Two or three of these, however, might be made to serve the purpose in a pinch. The only ones strongly favored are the four mentioned above.

T. Coleman duPont, who was graduated with the class of 1884 and who is a life member of the Corporation, has offered \$500,000 to purchase a site and aid in the building of the New Tech. Mr. du-Pont is a Delaware man. He was in Boston recently and has taken great interest in the purchase of a new site. One of his conditions has been fulfilled the State aid — and the other is almost surely bound to be. The second relates to the size of the tract to be purchased. Mr. duPont has set a minimum limit on the size of the site, and it is not likely that the trustees will go below that and thereby lose half a million dollars, so that there is little doubt but that he will be called upon for the fulfilling of his generous offer. Possibly the \$500,000 will not be the last of his contributions to help his alma mater, for Mr. dyPont takes much interest and pride in the school.

It is understood that other contributions already have been received privately on conditions. The State's aid of \$100,-000 annually for ten years goes only for maintenance, but will help to relieve the school of a burden and indirectly contribute towards the new move.

The new buildings will cost more than \$2,000,000 above the land; or at least that is the expectation now. Edward M. Hagar of the class of 1893 has offered to give whatever cement may be needed for construction. This does not mean that the buildings will be built entirely or mainly of concrete; that is a matter that will be decided later, and the opinion of Professor Despradelle of the Institute will be a large controlling factor in reaching a decision. Nevertheless, Mr. Hagar's offer is a generous one and will be a great financial help, for in so vast an undertaking a large amount of cement

is sure to be employed.

Preliminary sketches have been prepared for some of the sites merely to give an idea for possible development and to aid the trustees in coming to a decision. In each instance the sketch shows a dignified group of buildings symmetrical in outline and in perfect harmony with one another. At the same time care will be taken to have them useful for the purposes of the school. not intended to waste money in extravagant construction, as has been done in some of the newly created college groups - those on the ready-made college idea. Nor is it the intention to permit a helterskelter building policy to prevail. In a word, Tech will be a good example of city planning adapted to the needs of a great technical school—handsome to look at without a jarring note architecturally, and with each structure adapted to the uses to which it is to be put.

One factor in the building of the New Technology will be the disposal of the old buildings and land. The present site of the two large buildings in Boylston street is restricted so that it cannot be

disposed of to good advantage but there is every reason to believe that time will clear this point so that a much larger sum may be realized from the sale than could be obtained under present conditions. It has been suggested that as a site for a large hotel or big business block it could hardly be surpassed. Anyway, it is one of the most desirable pieces of property to be marketed in the Back Bay. The several buildings back of Copley Square can be sold to advantage at any time, as good offers have been received. It is likely, however, that the Institute will not hurry in disposing of these properties which it now owns and occupies, as it will take at least two years to get the new buildings ready; meantime the old ones must be retained. Should offers so advantageous that they ought not to be refused be received it is likely that the Institute might accept them with the provision that the school occupy them until ready to move.

This divided administration is one reason why the new buildings probably will be located within easy access of Copley Square. Too wide separation of the departments during the moving process—which necessarily must be gradual

-would entail much trouble.

The first buildings to be erected after the new site is selected will be those to house the engineering departments and to take the place of the structures back of Copley Square. Other building of the group, which will be carefully prepared for in the plans to be adopted for the whole scheme of ultimate development, will be erected as they are needed and as contributions of alumni or the sale of present property may make possible.

It may be said, however, that there will be no rush to market the present plant, as it is deemed to be increasing in value each year, and the whole plan is too big to be hurried and thereby skip a good oppor-

tunity to benefit.

The broadening functions of Professor Sedgwick's department have made it desirable to change the title of this department to the Department of Biology and Public Health.

# WITH THE ASSISTANCE OF THE PRESS

Boston Newspapers say fine things about Technology and urge its cause before the Governor

The attitude of the newspapers throughout the entire campaign for State aid was generous and helpful. After the bill had been passed unanimously by both houses of the legislature and had been sent to the governor, the following editorial comment appeared in Boston papers:

BOSTON AMERICAN

The Massachusetts Institute of Technology is asking Massachusetts to help her to become established in her new home by appropriating for her use one hundred thousand dollars a year for a period of ten years.

The legislature has wisely granted the Institute's request. There are few institutions in which Massachusetts may feel so much pride, and which reflect so much honor on the name of our State as the Massachusetts Institute of Technology.

She was founded by our great war governor, Andrew, and in half a century she has become the leading vocational school in the world. No other school has received such praise by the educators and statesmen abroad.

In the world struggle for business and in that greater struggle for efficiency which gives society the highest return upon its labor and upon the natural resources consumed, the value of highly trained experts is more and more recognized. Germany's wonderful modern industrial progress has its foundation in an early recognition of this fact and in the careful training of her young men.

The type of education received at the Massachusetts Institute of Technology lies at the bottom of modern industry. The Institute has now eight hundred and fifty Massachusetts boys fitting to become both experts in some important department of modern industry and educated men. To train these young men it costs

one hundred and twenty thousand dollars a year more than they pay the Institute for their education. This must be made up by private endowments or by the State.

The school is so young and yet has grown so fast that most of her sons have graduated within the last decade and have not had the time to acquire the great private fortunes from which private endowments must come.

No school is doing greater, if, indeed, any is doing so great a work in training our young men to utilize the forces of nature and her wealth for the highest benefit of society. It is a Massachusetts institution and is worthy of its name. More than one third of the student body are the children of wage-earners who are being taught at less than cost.

If she receives this State aid, she will continue to grow and prosper. If she does not, it may halt her career and that would be a great pity.

### CHRISTIAN SCIENCE MONITOR

The State is asked to give special aid for a limited period to one of its institutions that has most distinctly "made good." The case of this Institute has been considered most carefully by the committee on education and on ways and means of both the house and senate. Before these committees the special claims of the Institute were strongly urged by President Lowell, F. P. Fish, chairman of the state board of education, Mayor Fitzgerald, Mr. O'Brien, president of the Central Labor Union, and such representatives of commerce and industry as the president or vice-president of the Old Colony Trust Company, the Plymouth Cordage Company, the W. H. McElwain Company, the Boston Consolidated Gas Company, Stone & Webster Engineering Corporation, and the General Electric Company. All these gentlemen recognized the unique character of the Institute and insisted that money spent in maintaining its efficiency was a sound business investment on the part of the State.

Not to grant such aid as the legislature has recommended would be to neglect an unusual opportunity; large financial support for the carrying out of the scheme of rebuilding is promised by friends of the Institute oustide of the State of Massachusetts, but the promises are all conditional on the Commonwealth's proving its faith in its own institution.

### BOSTON POST

The bill extending State aid to the Institute of Technology, and in larger annual sums than heretofore, for the next decade, has now practically passed the legislature and will reach the governor within a short time. That he may conscientiously and consistently sign it would seem to be evident from the facts in the case.

According to the terms of the bill the State is to grant an annual subsidy of \$100,000 to the Institute for the next five years, and promises a continuance for a further period of five years, provided that in the meanwhile \$1,000,000 has been received by the school from other sources. No new principle is involved, no departure from the State's policy of declining to appropriate money for sectarian institutions of learning. The thing proposed is to be more helpful to a technical school that is just now in a period of exceptional difficulty, a school that is an honor and a credit to the State and that now proposes to help her boys by the establishing of eighty free scholarships.

Massachustts can afford to be liberal in a cause like this. She will reap from such an investment large dividends of increased efficiency of her citizens.

### BOSTON HERALD

The Massachusetts Institute of Technology is one of the great educational foundations of New England. It was a pioneer in what is essentially the voca-

tional type of higher instruction. It is now, with removal plans under way, passing through a peculiar crisis in its history. Not old enough to have raised a great body of alumni who have reached a position where they can put their shoulders to the wheel to the extent made necessary by its phenomenally rapid growth, it must have help from outside or curtail operations. The Commonwealth has always been to some extent its side-partner, and so to it the Tech not

unnaturally turns now.

Although this legislation is bad in principle, the Herald doubts if any real precedent will be established thereby. The State has aided the institutions of higher education, in rather illogical and haphazard ways, from the earliest times, as Josiah H. Benton pointed out in his remarks before the committee. long line of grants to colleges shows no progressive tendency which would emphasize the need of a sudden arrest of the practice now. The State is helping other technical schools; it is supporting the agricultural and normal schools, and it has always given the Institute some aid, making the proposed grant different in degree and not in kind from those that have preceded it. The continuance of the gratuity for the second five years of the ten-year period is conditioned by the terms of the bill on Tech's raising from other sources a million dollars more.

In all these circumstances, and particularly in view of the community's interest in the maintenance of the Institute's excellent work, the *Herald* is of the opinion that the governor would better sign the bill. The last thing the State can afford is to starve out its great educational institutions; they are a peculiarly happy asset of New England, contributing in no small degree to its continuing influence upon the affairs of the nation, in spite of the extent to which other sections are outstripping us in more material things.

### BOSTON ADVERTISER

Whatever foundation there may be for the rumor on Beacon Hill that the gov-



Apotheosis of President Maclaurin by the Boston Post artist

ernor is not well disposed towards the bill, now before him, to allow a State appropriation to help the Massachusetts Institute of Technology, it is certain that an adverse action on the measure would disappoint tens of thousands of citizens of this Commonwealth. The Institute is comparatively young and has outgrown the resources of its comparatively few alumni, who have strained their financial resources, already. It is non-sectarian, has always been helped by the State, and its wonderful success has been a matter in which the whole State has taken pride. Nobody questions the worth of its work, nor the urgency of its need. It is admitted that this is an exceptional case, and the legislature has been assured by spokesmen

for other institutions that an appropriation, if allowed, will not be regarded as establishing a precedent.

It is noteworthy that many prominent citizens of this State, who frankly declare themselves opposed to any general policy of State aid to ordinary institutions of learning, admit that the case of the Massachusetts Institute of Technology is quite exceptional and that it should be so treated. The general sentiment seems to be that Governor Foss would be justified in allowing the appropriation in this case without any hurt to public policy.

If you are not a member of the Alumni Association, join it. Your help will mean a lot to Tech.

# Fifty Years of Science

Compared with that of fifty years ago, the world we live in today is indeed a The transformation from new world. the old to the new has been chiefly the work of what we call "applied science." And this new world is new in two senses. It is new, not merely in the conditions of daily living, but also in the ordinary man's mental conceptions. This twofold change was presented with striking sharpness at the Congress of Technology, held in Boston last month in celebration of the semi-centennial of the signing of the charter of the Massachusetts Institute of Technology. So steady has the process of transformation been and so natural do its results seem to us today that it is hard for us to imagine how great the change has been. At an aviation meet last fall one of the spectators remarked that the most surprising thing about it was the fact that he, who had never seen a flyingmachine in operation before, found himself accepting it as a matter of course. This is typical of the general feeling toward all applied science. The ordinary man forgets, however, that the benefit he receives from applied science is the result of painstaking, minute technical attention and training. In this era the Massachusetts Institute of Technology has had a large share. A mere list of the speakers at the Technology Congress is an illuminating commentary on the work of such an institution, for the speakers, all graduates of the Institute, represented a great diversity in technical activities. Here, for example, was a man who is at the head of a research laboratory in a great electric company; here was another who is at the head of industrial training in a large negro institution; another who is employed by a concern engaged in the management of public utilities; another who is a chemist under the employment of a state board of health. And the diversity of their topics was equally interesting. One group of addresses was devoted to the investigation and control of industrial processes, and this involved subjects all the way from cotton bleaching to the reclamation of

the arid West. Another group of subjects concerned the relation of technical education to industrial development; and this included subjects ranging from the development of different branches of education, such as engineering courses, to the question as to the responsibility of manufacturers for the training of their own mechanics and foremen. Another group had to do with questions of administration and management, and several papers were devoted to methods of efficiency, one in particular giving an account of a concrete example in scientific management. A fourth group had to do with recent industrial development, ranging from the rise of the illuminating engineer to an account of handling the mail in a great railway terminal. A fifth section had to do with public health and sanitation. And the last had to do with architecture. There is, indeed, scarcely any part of the ordinary man's or woman's life that has not been affected by the advance in science. It is only the simple mechanical forms that remain as they were half a century ago. In this great advance the leader has necessarily been what is called "pure science." Before the principles of science can be applied to the solution of particular problems, like that of flying or of cleaning the rugs on the parlor floor, they must, by careful laboratorial research, be established. The Massachusetts Institute of Technology deserves the high place it has won through its devotion to both branches of science. It has been effective in applying knowledge already attained to practical use; on the other hand, it has been steadily pushing ahead to the discovery of new facts and new principles.—The Outlook, May 6.

# Goss, '92, on Important Committee

A committee has been appointed by the Chicago Association of Commerce to take charge of the work of preparing a report on the electrification of steam railroads of Chicago. Prof. W. F. M. Goss, '92, dean of the College of Engineering, University of Illinois, is one of three members of this committee.

# Broadening the Alumni Association

It is quite generally conceded that the effectiveness of the Alumni Association of the Institute is at least equal to that of any other college in the country. The recent action of the association abolishing all distinction between graduates and non-graduates as members of the association, should bring into affiliation with that body every former student who has any interest whatever in Technology. That the association is deserving of united support is shown by the character of the work done in the last two or three years especially by the effectiveness of its committees such as the committee on the Summer School of Civil Engineering, the Congress of Technology, and the committee on State These examples refer to the larger affairs of the association, but perhaps fully as important in the rounded development of alumni work are the many other activities which are quietly going forward and which all tend toward the general advancement of Technology interests.

As has been previously pointed out in these columns, the association has grown tremendously in its financial responsibilities. In 1906, the amount of money handled by the treasurer was something less than \$2500; in 1909, it amounted to almost \$15,000, and last

year, it approximated \$18,000.

The larger interest of its members is shown by the promptness with which dues have been paid during the early part of 1911, nearly as many dues having been paid at the present time as were received into the treasury during the entire year of 1910. The larger the interest of the membership, the greater will be the efficiency of the association and all former students now not members of the association who read this, should feel it a privilege to become identified with the new movement which is to place the Institute on even a higher level than ever before. Send applications to Walter Humphreys, secretary, Massachusetts Institute of Technology, Boston.

Obey that impulse! Join the Alumni Association now.

### Dartmouth Wins Over Tech

In a track meet which was held by Dartmouth and Technology at Hanover, May 12, the Dartmouth men were victorious. That the points were fiercely contested is shown by the fact that Dartmouth broke its college records in the mile run, shotput, and the two mile run; while Tech reduced six of the old records. the hammer, shotput, discus, pole vault and the quarter and half mile runs. Dartmouth's excellent work in which there were many surprises ran up the score of 81 to 45 against Technology. The biggest surprise of the meet was Ball's win of the two mile run which looked like Tech's event until the last half mile lap. Russell's victory in the 220 yard run was very exciting as he won over Wilson, Technology, by two inches. The new Technology records are hammer, Metcalf. '12, 130 feet, 101-2 inches; shotput. Chamberlin, '11, 41 feet, 11-2 inches; discus, Chamberlin, '11, 118 feet, 5 inches; pole vault, Salisbury, '11, 11 feet, 7 inches; quarter mile, Guething, '14, 50 4-5 seconds; half mile, White, '11, 1 mile, 58 seconds.

# Association Dues and the Review

A ruling of the post-office department makes it necessary to separate the subscription to the Review from the dues of the Alumni Association if the publication is to receive second-class privileges. In accordance with this ruling, the bylaws of the association have been changed so that the dues are now one dollar a year and subscription price for the nine issues of the Technology Review, one dollar a year in cases where members are in good standing. Subscription to the Review for non-members will be one dollar and a half a year. A check for two dollars can be sent to pay both dues and subscription.

It is interesting to note that the subscriptions to the Review have increased nearly 100 per cent. during the last two or three years and it is expected that the broadened constitution of the association which now makes no distinction between regular and associate members will

largely increase its effectiveness.

# The Congress of Technology

The Congress of Technology, which met in Boston April 10 and 11 in celebration of the semi-centennial of the signing of the charter of the Massachusetts Institute of Technology, was a pronounced success on the two main lines laid out by its projectors. The Congress opened on the afternoon of April 10 with an address by President Maclaurin of the Institute on "Some Factors in the Institute's Success." The greatest of these, he said, was the method of teaching due to William Barton Rogers, the founder of the Institute, and now phrased as "the learning by doing."

The second day of the Congress was given over to the presentation of papers on various aspects of applied science. These papers were grouped in six divisions so arranged that the large numbers of the outside public which attended all the sessions were able to hear papers on the topics in which they were especially

interested.

The Congress came to its climax with the banquet in Symphony Hall on the evening of April 11, when the enthusiasm of the thousands of Institute alumni and their guests, who filled the floor of the hall, was a sort of summary of the impressions made by the two days' pro-The papers presented at the public session gave to the audiences an extraordinarily adequate idea of how completely applied science shapes and controls the living conditions of the present. And as all the papers were by alumni or members of the Faculty of the Institute it was also made clear how large a part the Institute had played in creating the applied science of today.

These two ideas were expressed along with the third idea more immediately practical at the great banquet. It has been clear for some time that the future development of the Institute of Technology is hampered by the lack of adequate endowments and buildings. The feeling that the beginning of the next half century of the Institute ought soon to see a New Technology, carrying on the standards of the past with greater

facilities, was the dominant note in all the speeches at the banquet. The alumni are eager to do their full share toward making this New Technology a reality. Their earnestness was shown by President Maclaurin's announcement that alumni have already definitely pledged themselves to give a very large part of the sum necessary for buying a new site for the Institute, and that Edward M. Hagar, president of the Universal Portland Cement Company has promised as a gift all the cement needed for erecting the new buildings in reinforced concrete. Meanwhile, the choice of the site itself, Doctor Maclaurin said, had been narrowed to three, all of which are within a short distance of the present buildings.-Electrical Review.

# The New England Intercollegiates

At the twenty-fifth annual meet of the New England Intercollegiate Athletic Association which was held at Springfield, Mass., May 20, Williams College carried away the honors with 30 points; Dartmouth took 24, and Technology 18. The standing of the other colleges was as follows: Maine 14; Vermont 12; Amherst 11; Bates 10; Brown 9; Worcester Polytechnic 8; Wesleyan 6; Colby 5; Holy Cross 2.

The conquest over Dartmouth was unexpected but the ten-year cup will rest in Dartmouth's trophy room because of five previous wins. New marks were made in the four runs, the low hurdles, the hammer throw and the pole vault.

At the annual meeting of the American Institute of Electrical Engineers, in New York, May 16, the Edison medal was presented to Frank J. Sprague by the president of the association, Prof. Dugald C. Jackson, of the Institute. Announcement of the award was made by Prof. Elihu Thomson, of the Corporation, who is chairman of the Edison medal committee, and an address on "The Relations of Government Control to the Development of Electrical Railways and the Electrification of Steam Lines," was given by George F. Swain, '77.

# Tech Athletics Unique

Athletics at the Massachusetts Institute of Technology are on a quite different footing from those in other colleges, and the Institute's success in overwhelmingly defeating Brown in last Saturday's meet should make a brief outline of the "Tech system" interesting. In the first place, during the first year a certain amount of physical exercise is in the curriculum, and a student who neglects his work in this line will miss his marks and be kept from promotion just as if the defection

was in, say, mathematics. The system of prize giving is likewise quite different from that usually adopted in athletic work. The students have a physical measurement on entering the school and at the end of the year are measured again. The man who shows the greatest improvement in the essential measures is the man who wins. He might not gain it if it were merely a question of points, but being in percentages of improvement, the weakest man who enters has as good or even a better chance than the man already an athlete. Awards in the shape of medals, five in number for each year, given through the generosity of Samuel Cabot, and five honorable mentions mark those who are winners.—New York Even-

# The Tech Bill

ing Sun.

The governor has signed the Tech bill, although with some misgivings and after wresting from the management

further assurances that this action of his will not be allowed to become an unfortunate precedent. His misgivings as to the present measure could not be traced to any lack of friendliness to the Institute. since he has been one of its prominent benefactors, even offering several years ago to give it a piece of land at Mt. Hope for its new location. He merely shared in the hesitation which Massachusetts men feel over having the State assume any large share of the burden of the higher education: but the safeguards in this instance appear adequate, and the governor must be congratulated upon reaching in a business-like way an extremely sound conclusion. The Tech can now go forward in its splendid career.—Boston Herald, May 21.

Pops, Tuesday, June 6

The Pop Concert will occur on Tuesday. June 6, at eight o'clock. interesting happenings of the last few weeks will no doubt make the celebration something of a love feast. It is expected that the attendance will be large. committee having the matter in charge consists of George B. Glidden, '93, A. P. Underhill, '96, and A. W. Rowe, '01. It is suggested that the classes meet for dinner before the Pops at various hotels and restaurants near Symphony Hall as they did previous to the Smoker at the time of the Congress of Technology. The graduating class will be welcomed soon after eight o'clock and will be presented with its alumni banner by Doctor Noves, president of the association.



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MRS. WILLIAM BARTON ROGERS

# MRS. WILLIAM BARTON ROGERS, 1824-1911

Daughter of a Notable Publicist; Wife of a Great Man of Science; Co-Laborer with him in Creating the Institute; a Shining Example of American Womanhood.

When the Massachusetts Institute of Technology some day erects upon its new site a memorial to its eminent founder, William Barton Rogers, it will do well to make it a memorial also to Emma (Savage) Rogers, his wife. Seldom has an educational institution been so fully indebted for its characteristic spirit and its permanent aim to the leadership of one man as is the Institute to that of its first president; and seldom have man and wife so completely supplemented one another in the carrying forward of a work of great public consequence as did Professor and Mrs. Rogers.

Emma Savage was of fine New England stock, being a daughter of Hon. James Savage, the distinguished author of Savage's "Genealogical Dictionary of New England," and of Elizabeth Otis (Stillman), widow of James Otis Lincoln.

In the "Memoirs of the Hon. James Savage, LL.D.," prepared by George S. Hillard, and in the "Letters of James Savage," edited in her eighty-second year by Mrs. Rogers, one sees whence the daughter derived many of her characteristic traits,-her vigor of intellect, her breadth of interest, her downrightness of opinion, her old-school courteousness, and her ability to write and speak with a wealth of language truly Johnsonian. Seldom has Boston produced a figure more characteristic than that of Mr. Savage: and whether as a prominent alumnus of Harvard, as a member of the city government and of the school committee; as a state senator, as founder of the Provident Institution for Savings, or as an active member and finally as president for fourteen years of the Massachusetts Historical Society, he was a compelling force in the development of Boston and a leader among men. The ninth of the eleven children of Habijah and Elizabeth (Tudor) Savage, James Savage was left practically orphaned at an early age; but fortunately was adopted, in all but the legal sense, by

Mrs. Mary Lincoln, widow of Gen. Benjamin Lincoln, to whom he was always "her dear child." Her son, James Otis Lincoln, dying in 1819, Mr. Savage, four years later, married his widow. Her two children became as his own and by her he had four children more, Emma being the eldest. His other two daughters, Harriet and Lucy, died in early womanhood; and his son, Lieut.-Col. James Savage, Jr., of the second Massachusetts Regiment, was unable to rally from severe wounds received at the Battle of Cedar Mountain.

Born March 4, 1824, in a house on Hayward Place, Emma Savage lived from 1831 to 1871 at 1 Temple Place in a house built by her parents on what was then a secluded residential "nook" not yet opened through to Washington Street. She attended, first, a dame school kept by a Mrs. Lamb, on Tremont street; then a well-known private school belonging to a Mr. Fowle; and for a year or more was a pupil in the unique school kept by A. Bronson Alcott in the Masonic Temple building, on the site now occupied by the R. H. Stearns Company. Her summers, in early youth, were spent at Machias and Dennysville, Me., where her mother had relatives; and from 1846 till after her father's death, most of the warm months of each year were passed at Sunny Hill, a beautiful house, with extended view, in Lunenburg, Mass., built by Mrs. Savage.

In the summer of 1845, while traveling in the White Mountains, the Savage family met William Barton Rogers, at that time professor of natural philosophy at the University of Virginia and state geologist of Virginia. From this casual meeting developed a warm friendship; and on June 20, 1849, Professor Rogers and Miss Savage were married. On the same day they sailed for England on the Europa, mainly for the purpose of attending the meeting of the British Association for the Advancement of Science, at Birmingham. At that meeting Professor Rogers first met many men, such as Darwin, Faraday, Murchison, De la Beche, Playfair, Lyell, etc., with whom he had long been in correspondence; and thereafter his home was theirs, for so many of them as might come to America, and their homes were his.

The first four years of the married life of Professor and Mrs. Rogers were spent at the University of Virginia; but, in 1853, the death of Mrs. Savage made it imperative for the daughter to return to Boston, in order to supervise her father's household.

Most faithfully and lovingly did she and Mr. Rogers care for him until his death, in 1873, after which they took up their winter residence at 117 Marlborough Street, making a long summer sojourn at beautiful "Morningside," in Newport, which they had built in 1872.

Upon first coming to Boston, Professor Rogers occupied himself chiefly in lecturing and writing; but in 1860 he became the active leader in carrying forward the project of certain manufacturers and merchants in Boston for the creation of a polytechnic school and museum along the lines suggested by William Rogers and his brother Henry, as early as 1846.

The story of the establishing and maintaining of the Institute of Technology in the face of very serious difficulties is well known: but the important service performed by Mrs. Rogers in the carrying forward of this immense task is not so generally appreciated. On the one hand, her engaging personality, as well as her family connections, did much to interest in her husband's projects those who might otherwise have been indifferent; while, on the other hand, her unflagging devotion to Professor Rogers, her ceaseless watch over his precarious health, and her skill in caring for him. undoubtedly kept him alive through the twenty-one years of anxiety and difficulty which supervened between the presenting to the legislature of 1860 of the "Memorial" for the creation of the Institute and the placing, in 1881, of the well-established institution in the younger hands of President Walker. At least twice during that almost ceaseless struggle Professor Rogers would almost certainly have died had it not been for the sleepless care of his devoted wife; and not once during that period was he other than a serious invalid keeping at work by his own indomitable will and kept equal to the strain of that work by his wife's unremitting and wise care.

The building up of the Institute of Technology involved not merely dealing with the legislature, raising money, determining courses of study, and securing a board of trustees and a teaching staff. It necessitated on the part of the Founder and first President participation and leadership in public affairs, especially in many forms of scientific and educational activity. It meant, therefore, speaking, writing, attendance upon scientific and other conventions, and the acceptance of those administrative positions the holding of which might properly advance the welfare of the Institute.

Consequently Professor Rogers was active in the American Academy of Arts and Sciences, the Boston Society of Natural History, the American Association for the Advancement of Science, and especially the National Academy of Sciences, of which he was one of the founders and, later, president. Neither did he neglect such clubs of a semi-literary, semi-social character as the "Thursday Evening," of which he was president, and the "Round Table." In all these interests, as well as in his attendance upon the meetings of learned societies abroad, Mrs. Rogers' personal charm, tact. vivacity, and skill as a hostess were invaluable to him supplementing, as they did, rare gifts as a speaker and as a conversationalist on his own part. It is idle to minimize the value of the personal element in furthering ideas and plans; and the part taken by Mrs. Rogers in making not only the Institute itself, but the whole new propaganda of pure and applied science acceptable cannot be too highly emphasized.

In the "Life and Letters of William Barton Rogers," edited, with the assistance of Professor Sedgwick, by Mrs. Rogers in 1896, the so effaces herself that it is difficult to realize the important rôle she played in the thirty-two years of that life following 1849. And it is proper to respect that reserve to which she so rigidly adhered by simply stating that those were years of rare devotion and happiness between man and wife absolutely congenial and bound together not only by deep affection, but also by common

devotion to high and absorbing interests.

The earthly tie was severed by Professor Rogers' tragic death at the graduation exercises of the class of 1882; but this irreparable loss seemed only the more closely to bind Mrs. Rogers to the work of the Institute of Technology. It is no exaggeration to say that the years of her widowhood, which were closed by a peaceful death on May 18, 1911, just after the fiftieth anniversary of the founding of the Institute, held but one real interest,—that of furthering in every way possible to her the welfare of Technology and of every one associated with it. Let it not be understood from this that she became a person of one idea. On the contrary, to her latest day she maintained an extraordinary interest in all matters of genuine importance, and was indefatigable in reading, in attendance upon lectures, concerts, the theatre and the opera, and in the exercise of a hospitality which to those privileged to enjoy it was a liberal education. Only a few weeks before her death she

went to a Vincent Club performance one evening and to a Symphony concert the following evening.

Mrs. Rogers, moreover, was most catholic and yet most discriminating in her giving. She had a long list of organizations and individuals, to whom, after careful inquiry, she regularly gave money; but she was especially eager in helping, not only financially, but by personal activity, those who, in one way or another, were struggling towards self-support. There are hundreds today who are under substantial obligation to her for help of this kind.

To the student trying to work his way through the Institute, to the homesick Technology student living in a dreary boarding-house, to the Institute teacher or alumnus needing some species of help, Mrs. Rogers was especially the good angel who opened her purse, her home and her heart. Every enterprise for the advancing, directly or indirectly, of the Institute's well-being was sure of her active support; and, in such crises as that of the proposed merger with Harvard University, her intimate knowledge of every step of Technology's growth was a tower of strength to those working for continued independence.

A striking quality in Mrs. Rogers was her abounding vitality. She was absolutely healthy in every meaning of that word,—so healthy physically that she practically never had a day's illness untill her eighty-seventh year, and so healthy mentally that she could always be depended upon to consider every question sanely and without sentimentality. She had very positive opinions and expressed them freely and with vigor. Yet she never failed in courtesy or in absolute fairness. She was a singularly just woman, shrewd in the management of her business affairs, loving comfort but despising display, and keen in getting out of life its true and enduring values. So well-born as to have no thought of being anything but simple and democratic, having so many ways of making her money useful as to abhor waste and ostentation, so richly provided with mental resources as to feel only pity for the mere pleasure seeker, Emma Rogers was fortunate above most women; but she felt strongly the obligation which such fortune entails, and paid back to society in more than full measure her unusual debt to it.

What the Institute has been and is to be in the development of the United States, what the high ideals of President and Mrs. Rogers have been to Technology, and what her well-hidden benefactions have meant to numberless individuals, no one can measure. While these intangible influences do not cease with her death, neither do her material gifts. As was to be anticipated, under her will the larger part of her property goes to the Institute of Technology to be used as may seem to its best interests. The amount thus received will be approximately half-a-million dollars; and it adds interest to this munificent bequest to know that it includes wharf property acquired by Thomas Savage almost immediately after the settling of Boston; the Temple Place property which for the earlier half of her life was her home; and the Marlborough Street and Newport properties which were her winter and summer houses during the later half of her beautiful and useful life.

Her protrait, painted by Ipsen, will adorn the Institute. It shows a short, somewhat stout woman, with beautiful white hair, a soft, pink skin, small, refined hands, keen eyes, a firm chin and of an alertness that more than eighty years of ceaseless activity could not diminish. The face has beauty in the ordinary sense. It has, in addition, the true beauty of a fine soul. Every Institute man cannot but feel indirectly, as those who were fortunate enough to know her felt directly, the inspiration to true living and high endeavor, that comes in the fullest measure from such a woman as she.

James P. Munroe, '82

# Proceedings of the Congress of Technology

Arrangements have been completed for the publication of the proceedings of the Congress of Technology by the McGraw-Hill Book Co. It is probable that this volume will be issued at an early date in the fall. It will be six inches by nine inches, illustrated, and will contain approximately 500 pages. From an engineering standpoint it will possess especial value as a record of progress and present day practice in many fields. Historically it will be of interest to every Tech man who has a spark of pride in the Institute's accomplishments during the past fifty years. The established price after publication will be \$3.00, but prior to that date advance orders accompanied by cash will be accepted at \$2.50 per volume. Orders may be sent and checks made to Walter B. Snow, Agent, 170 Summer Street, Boston, Mass.

# ELLEN HENRIETTA RICHARDS, A. M., Sc. D.

# A biographical sketch of her life—Her remarkable career and her many public activities

The death of Mrs. Ellen H. Richards, on the thirtieth of March, occasioned a sense of personal loss to an unusually large number of friends, acquaintances and co-laborers in widely different walks of life. For nearly forty years a participant in the work of the Institute of Technology, she had become a prominent and most active figure among its corps of instructors; her scientific work had gained for her a wide acquaintance among various scientific organizations, local and national; her social service and interest in all that pertained to the higher education of women and to the betterment of living conditions for all had made her a leader whom thousands had learned to respect and were glad to follow.

Mrs. Richards was born at Dunstable, Mass., in 1842, the daughter of Peter and Fanny G. Swallow. She entered Vassar College in due course and was graduated in 1870, having devoted much time to astronomy as a pupil of Prof. Maria Mitchell. She soon afterward connected herself with the Massachusetts Institute of Technology, turned her attention to chemistry, and was graduated from that course in 1873, with the degree of Bachelor of Science. While the reasons for the selection of chemistry as a field for her later work are not accurately known, a memorandum which was apparently made by her indicates that it was because she felt that greater opportunities for effective service to her fellow beings were open in that than in other fields and this probably represented the first, and possibly unconscious, leaning toward public service which later manifested itself in so large a measure.

The marriage of Miss Ellen Swallow to Prof. Robert H. Richards, in 1875, marks the beginning of that mutually sympathetic and hospitable home life which has been generously shared with hundreds of Institute students and other friends for more than a quarter of a century.

During the period from 1873 to 1884, Mrs. Richards was active in various fields. A part of her time was given to teaching, but much of it was devoted to the assistance of Profs. John M. Ordway and William Ripley Nichols. The former maintained an active practice as consulting expert in technical chemistry, while the latter had gained an enviable reputation as an authority in matters of water supplies. It was also during this period that the Women's Laboratory was established to afford better opportunities for the scientific education of women. It was housed in a portion of a one-story structure located between the present sites of the Rogers and Walker Buildings, and later removed when the Walker Building was erected. This laboratory was established largely through the instrumentality of Mrs. Richards in enlisting the financial support necessary for it, hers was the guiding hand in its management, and hers the leading spirit in this, as in other subsequent movements of similar import.

Her association with Professor Ordway laid the foundation for her later service (1884-1894) as chemist to the Manufacturers Mutual Fire Insurance Co., in which she did much interesting work bearing upon the danger from spontaneous combustion of various oils in commercial use. It also gave her an appreciation of technical problems which added much to her efficiency as a teacher. Her work in sanitary chemistry with Professor Nichols was destined to be of still more significance, for, in 1887, the State Board of Health of Massachusetts began a comprehensive survey of the water supplies of the State which involved a series of problems for the solution of which she was especially well prepared. This work was under the immediate supervision of Dr. Thomas M. Drown, but the success of the undertaking, now a classic of its kind, was in no small measure due to the enthusiasm, energy. experience and insight with which Mrs. Richards threw herself into the work of devising methods, recording results and organizing assistance. Over twenty thousand samples of water were examined under her supervision, a record never approximated before that time, the results of which made possible generalizations of lasting value, not only to this community, but to the world. Mrs. Richards was chemist to the Board of Health from 1872 to 1875 and water analyst from 1887 to 1897.

Mrs. Richards also found time to take an intelligent and helpful interest in the professional work of Professor Richards and some of her earliest published work associated itself with the mineral industries. She was elected to membership in the American



ELLEN HENRIETTA RICHARDS, A.M., Sc.D.

Institute of Mining Engineers, a distinction conferred upon only one other woman. She received the degree of Master of Arts from Vassar College in 1873, and her large circle of friends was greatly pleased by the deserved recognition on the part of Smith College in the conferring upon her of the honorary degree of Doctor of Science, in 1910. She was also for many years a member of the Board of Trustees of Vassar College.

In 1884 Mrs. Richards was appointed instructor in Sanitary Chemistry at the Institute of Technology, a position which she held at the time of her death. For many years she directed the entire instruction in the chemistry of air, water and foods, for chemists, biologists and sanitary engineers, and only relinquished the chemistry of food supplies when the pressure of other affairs made this necessary. Her service as an instructor was helpful and inspiring, and the extent of her personal and financial sacrifice for her pupils and for the increase of the effectiveness of her laboratory will probably never be adequately known or appreciated. She also maintained an extensive private practice in sanitary chemistry for many years and acted in an advisory capacity for a very large number of public and private institutions. publications relating to sanitation have been numerous and varied, and she maintained active membership in, and participated in the meetings of local and national societies dealing with water supplies and public health problems.

All of this would seem a sufficient achievement for even a busy life, but there still remains what may possibly be regarded as the most important aspects of Mrs. Richards' life work, namely. her leadership in matters pertaining to home economics and to the education of women. Preëminently a successful organizer, she gave more and more time and attention in recent years to problems relating to the conservation of human life and energies and the uplift of her fellow beings. With extraordinary energy and tireless activity, she traveled from one end of the country to the other, lecturing, teaching and, when necessary, pleading in behalf of the causes which were so dear to her. In this work she was highly successful, not only in the attainment of immediate benefits, but in the inspiration of others to foster and continue the enterprises which she inaugurated. It is gratifying to note that plans are already on foot to bring together a memorial fund to be known as the Ellen H. Richards Research Fund, the proceeds to be used for the promotion of advanced work in Sanitary Chemistry, in recognition of her labor and self-sacrifice. Her writings upon household economics and kindred topics include numerous books of recognized value, a large number of papers read before gatherings of the most varied character, and many magazine articles.

Her death occurred at her home at Jamaica Plain, after a brief illness. She literally spent the last remnants of her strength in public service, never fully recovering from the strain of her last

public speech in behalf of better standards of living.

A powerful leader, a wise teacher, a tireless worker, of sane and kindly judgment, Mrs. Richards has taught and inspired thousands to carry forward the movements which she has inaugurated. Her associates and co-laborers necessarily mourn their loss and miss her leadership, but they will best express their appreciation of her life and its far-reaching influence by increased activity in behalf of those phases of human progress and betterment for which she sacrificed herself so freely.

Н. Р. Тацвот, '85.

### IN MEMORIAM

### ELLEN H. RICHARDS

A voice is hushed: but ere it failed,
The listening echoes caught its tone,
And now its message clear and keen
On every wind of heaven is blown.

A staff is broke: but ere it snapped,
Those who had leaned on it so long
Had made its steadfast fibre theirs,
And fare now forward, straight and strong.

A light is quenched: but ere it paled,
It lit a hundred torches' flame,
That shine across the darkening sky,
And star with gold one honored name.

L. E. R.

APRIL, 1911.

# MRS. RICHARDS' UNIQUE POSITION

An appreciation of her work at the Institute by Prof. Sedgwick

We have lost a great teacher. For whatsoever else Mrs. Richards was-and that was much-she was first and foremost a teacher. She was fortunate in being closely associated in her professional education and in her professional work with two distinguished chemists, the leaders of their time in sanitary chemistry, a subject which she early made her own. From William Ripley Nichols especially, who from the time of his graduation from the Institute in 1869-the same year in which the State Board of Health of Massachusetts was organized—until his death in 1886, was the highest authority on water analysis in the western world, and whose mind was one of the keenest and finest that I have ever known, Ellen Swallow as a student, and Mrs. Richards as an assistant and associate, gained her principal training in the methods and ideals of sanitary science and public health service. And when Professor Nichols' successor, Dr. Thomas Messinger Drown, was invited in 1887 by the then newly-organized State Board of Health to take charge of the sanitary survey of the inland waters of the State, the first in that brilliant series of sanitary undertakings which have brought renown to Massachusetts, Professor Drown turned at once to Mrs. Richards as the proper person to supervise and administer the great laboratory for water analysis which the State Board of Health established, and for years maintained in the Walker Building of the Institute. Here a few years later a celebration was held when the ten thousandth specimen of water sent in for analysis came to be analyzed. Here also was prepared that famous "normal chlorine" map of Massachusetts which was the first of the kind to be prepared anywhere and which has served as a model in sanitary surveys of states and countries all over the world. This laboratory, always presided over with a firm yet genial hand by Mrs. Richards, will long remain famous in the annals of American water analysis. From it have gone out dozens of men and women who are today directors or workers in similar laboratories all over the United States.

But fond and proud as Mrs. Richards was of her laboratory of sanitary chemistry, she was never restricted to that narrow space. At her home in Jamaica Plain, where hundreds of Technology students and teachers have from time to time foregathered and shared her gracious hospitality, she found time to prepare a series of books which extended her influence as a teacher to schools, colleges, clubs, associations and societies almost without number. She was rightly recognized as an authentic speaker upon a wide range of sanitary subjects and was always heard with respect and regard, for the very reason that she spoke with the authority of the laboratory and the scientific world and not merely as one of the scribes. The mere enumeration of her writings would fill a column and one needs only to open one of her volumes, such for example as her latest, "Conservation by Sanitation," to marvel at the breadth of her writings and the extent of her reflection upon sanitary themes. She was without question a master of her subjects, and the foremost sanitary authority of her sex in the whole world, and yet Mrs. Richards was always a woman, believing intensely in the home and its fundamental importance. Most of her books and writings deal in fact directly with the home, such for example as "The Chemistry of Cooking and Cleaning," "The Cost of Living," "The Cost of Food," "The Cost of Shelter," "The Art of Right Living," "The Cost of Cleanness"; and although her interests and work reached out far beyond the home and into the world at large, she was ever mindful of its supreme importance in American life.

Mrs. Richards was a graduate of Vassar College, always a loyal alumna and for a long time a trustee. She was, however, no less devoted to the Institute of Technology, from which she received the degree of bachelor of science in chemistry in 1873. She appreciated intensely that rigid discipline which has always characterized its training and she was keenly alive to its achievements and its rising reputation. She was personally and closely attached to its founder and first president, William Barton Rogers, and his wife. To the women students of the Institute she stood literally in loco parentis, and many a girl struggling to meet financial obligations or the academic requirements of the Institute has found in Mrs. Richards an elder sister or a foster mother. It was, therefore, with the greatest satisfaction that her friends and colleagues learned of the conferring upon her of the degree of Doctor

of Science by Smith College at its recent anniversary, for upon no one could that degree have been bestowed more justly.

It is a matter for congratulation that death came to Mrs. Richards, doubtless as she would herself have wished, while she was still full of intellectual vigor and hard at work. Many gaps left by death are not difficult to fill, but this is not the case with Mrs. Richards. Her position in the Institute and her work in the world were both unique. No one can fill her place. Other women may become experts in water analysis, and preside over laboratories, but no one hereafter can possibly gain the peculiar historic equipment which fell to Mrs. Richards. Other women may, and no doubt will, make addresses and write books upon sanitation and the home, but no one else can ever do these things as Mrs. Richards has done them, for the reason that she was herself an evolution and represented an epoch. We are always too prone to undervalue things familiar and near at hand, and Boston and Massachusetts have never adequately appreciated Mrs. Richards or her work. But now that she is gone and no one can possibly take her place, we may begin to realize the extent of our loss.

Those of us who have had the privilege of being her colleagues and enjoying her friendship will miss her vigorous personality, her sane and keen judgments, her cheerful smile. We are grateful to have shared her companionship and to have felt her womanly influence. Her name is already writ large in the history of New England women and of the Institute, and many who knew and valued Mrs. Richards will hold her in affectionate remembrance, both for what she was and for what she has done.

W. T. SEDGWICK.

Boston Transcript, March 31.

The growth of the advertising in the Technology Review is entirely spontaneous, as the Review has no advertising solicitors nor does it employ agents. The number of Reviews printed and circulated this year including the July number is 30,000; the November and December numbers which will complete the year will bring the total to nearly 40,000. The character of the advertising carried is the best indication of its usefulness.

#### ACTION OF WOMAN'S EDUCATION ASSN.

The Woman's Education Association wishes to express the deep sense of personal loss which comes to it by the death of Mrs. Ellen H. Richards. Since 1875, for thirty-six years, Mrs. Richards has been a member of our association. During all this long period there has never been a time when she had not been actively engaged in furthering one or more of the most vital and interesting features of our work. As volunteer teacher, as hard-working member of various committees-notably of the Chemical Laboratory for Women, of the Summer Laboratory at Annisquam, and of the Domestic Science Committee, as chair. man of the Committee on Public Schools, and as vice-presidenof our association, she was untiring in the wise and enthusiastit service which she rendered. Many enterprises of importance to the welfare of the community are included in so long a perioe of active work. Among them all it is well to remember witd special gratitude the generous help given so long ago by Mrh Richards to the development of the opportunities for womes. at the Institute of Technology. In the annual report of oun association for 1883, at the end of the sixth year of the work or the Sub-Committee for the Chemical Laboratory for Womenf there is the following tribute to Mrs. Richards:

"The results thus far have exceeded our anticipation, but they have been obtained at the cost of great personal sacrifice on the part of a few devoted workers. To one of the professors (of the Institute) and to Mrs. Ellen H. Richards, a member of our association, our success has been due. Mrs. Richards was the inspirer of the enterprise, and has not only given it the benefit of her experience and thorough scientific training, but has lavished upon it time, and strength, and money. To the successful carrying out of the work then tentatively begun is due the assured existence of the laboratory as part of the Institute of Technology."

Such was the quality of effort given by Mrs. Richards to one of the earliest undertakings of our association. For nearly thirty years she continued to work for the department thus established. This persistency, this faithfulness and unflagging

enthusiasm in face of all obstacles, this generous giving of herself, were characteristic of Mrs. Richards in every piece of work to which she lent her hand. Our association is grateful for its share of so long and so fine a record of noble service to the community.

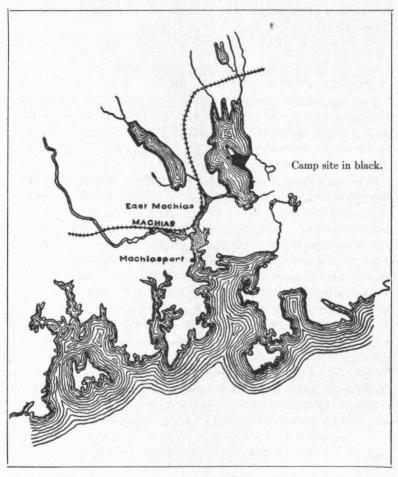
## Technique Pays a Dividend

Technique 1911 closed its accounts late in the spring with a balance to its credit of \$717.82. This is almost an unprecedented event, and is due to the business-like methods employed by the board, to the foresight of its managers and to the diligence of all those connected with it.

The application of this surplus is equally commendable: \$250 was given to the Athletic Association to send the track team to Springfield to compete in the New England Intercollegiate Athletic Association meet this spring; \$125 has been appropriated to proyide record boards for perpetuating athletic records at the Institute. There are to be fifteen or twenty of these boards handsomely finished and framed, each board to be devoted to not more than two athletic events. These will be probably located in the Union and on them will be the names of past and present record holders with a space for the record breakers of the future; \$60 was appropriated to help the Senior Portfolio committee, and \$50 was devoted to souvenirs for the senior class dinner which were in the form of small gilt ash trays, handsomely embossed with the Technology seal. Each man present at the dinner received one of these. As is usual when there is a surplus, gold watch fobs were provided for the members of the Board. There is a small balance in the treasury and a few unpaid advertising accounts so there will probably be \$75 or \$100 more to the credit of the Board.

### Special Site Committee Named

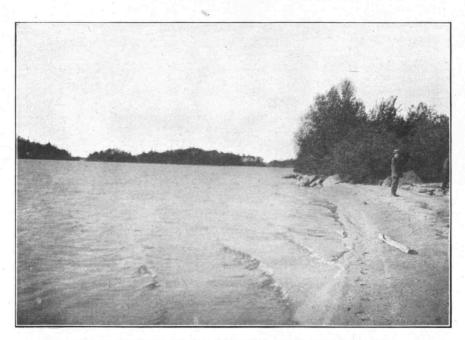
At a meeting of the Corporation held in June, the following members of the Corporation were made a special committee on site with power: President Richard C. Maclaurin, George Wigglesworth, Everett Morss, Francis R. Hart and Edwin S. Webster.



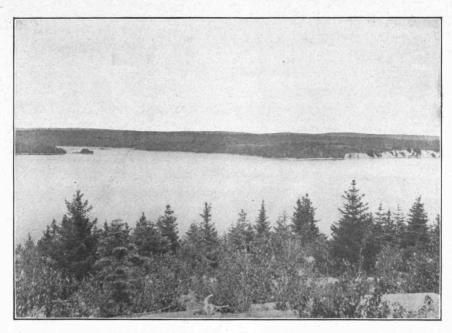
Map showing location of property—Scale 4 miles to the inch.



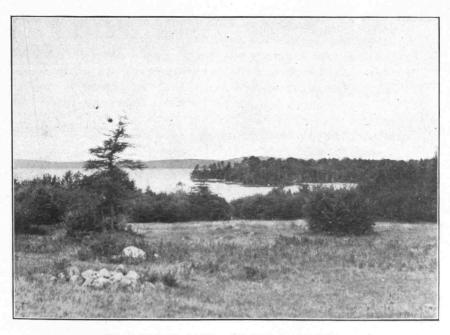
CHARACTERISTIC SHORE SCENERY



LOOKING TOWARD ISLAND AND BOAT-HOUSE COVE



VIEW OF SITE FROM ACROSS THE LAKE
The camp will be located just above and to the left of the eroded bank



BOAT-HOUSE COVE,—ON THE PROPERTY

### THE SUMMER SCHOOL OF CIVIL ENGINEERING

Description of the beautiful site presented to the Institute on the shore of Gardner Lake near East Machias, Maine, and some of the plans for its development

Five years have elapsed since plans were outlined for the establishment of a summer school as an integral part of the course in civil engineering offered to the students of the Massachusetts Institute of Technology. The subject was first broached by Professor Swain and was called to the attention of the Corporation by the President in his report of December, 1906. The cause was further advanced by investigations by the department of civil engineering during the next two years. In the fall of 1909, the newly organized Alumni Council, looking for some field of activity in which the alumni might cooperate with the Corporation to the advantage of the Institute, took up consideration of the summer school project and appointed a committee to investigate and report upon it. And now, after two years of cooperative work between the committee and the professors of the department of civil engineering, the plan for a summer school is taking definite shape in a most encouraging way.

The idea of establishing a summer school of engineering is not a new one, for the Institute has already conducted summer courses in these subjects at South Deerfield and Lancaster, Mass., Schoharie and Keeseville, N. Y., Delaware Water Gap, Pennsylvania, Lake Sunapee, N. H., and at Ellsworth, Cherryfield, Rangeley Lake, Machias and East Machias, Me. The courses in surveying, field geology and hydraulic measurements thus given were optional, however, and were taken only by a part of the students enrolled in the department,—usually by not over twenty-five men.

With the growth in numbers at the Institute, and the necessity for going longer distances to find suitable locations for the work, with resulting waste of time and energy; with the constant demands for more available time in the class room for broadening the course; with the growing desire to give more thorough instruction in surveying under more natural and advantageous conditions, the department has felt the absolute necessity for the development of a summer school of engineering in which courses in surveying railroad location and hydraulic measurements might be given during a period of two months, more or less, in the summer season between the sophomore and junior years of the course, as an essential and obligatory part of the training in this department.

The requisites for such a school were,—a location sufficiently distant from railroads and settlements to develop an independent life, yet sufficiently near so that the traveling expenses should not be burdensome to the students; good hygienic conditions which should insure the building up of the students' health; a diversified topography, suitable for general surveying and railroad field work, including heavily wooded as well as open lands; a large lake or body of water suitable for hydrographic measurements, and giving wholesome camp life and surroundings; ready access to the ocean or to a tidal stream upon which tidal observations might be conducted; a river suitable for stream measurements; and finally, if possible, a location at which power might be developed for lighting the camp, pumping its necessary water supply, and perhaps conducting hydraulic experiments.

Such a school of engineering promised to make the courses in surveying and hydraulics broader and more effective, to train the student in camp life and bring home to him in a practical way some of the important questions of hygiene involved by it, to simplify the problem of giving to graduates from other colleges desired training in the shortest possible time, and finally, to build up an esprit du corps amongst the students through their intimate contact with one another and with their instructors in such a camp, which should be of great advantage to them, to their work and to the Institute.

The relative desirability of a permanent camp, or temporary location at different places from year to year, was carefully considered. While the greater interest resulting from having the summer school at different points was clearly recognized, the difficulty of handling large numbers of students increases rapidly with their numbers. With but 25 men, it is possible to find many suitable locations. With a body of 150 students, however, the question of properly housing and feeding the students, providing evening work and class rooms, the control of the camp and the student body, and many other questions of a very practical nature, arise.



FOREGROUND AT THE SITE



VIEW FROM REAR OF SITE

The establishment of a permanent camp was therefore decided upon, and this involved the purchase of a tract of land of at least 200 acres, and made desirable a much larger area.

The committee considered the possibility of cooperating with other educational institutions having summer schools, with some fish and game club, with lumber interests, and even of going into some cooperative forestry enterprise, but fortunately it was finally able to purchase a site which will leave the Institute independent of others, free to develop along such lines as may hereafter prove most desirable.

In response to the committee's desire that all promising summer school sites should be personally visited. Prof. Arthur G. Robbins of the civil engineering department, generously offered to give a considerable amount of his time to such inspection, as did other members of the department. Topographic maps of the New England states were carefully and systematically examined and the summer schools of engineering of other colleges were visited. Many promising situations were considered, with the result that a site was chosen upon Gardner Lake near East Machias, Me., which is situated in a locality in which the summer school of engineering had already been held.

East Machias lies at a distance of 347 miles from Boston, upon the Maine coast, between Bangor and Eastport. It is upon the Eastport line of the Maine Central Railroad and when the summer school shall be attended by upwards of 100 men, it may prove possible to charter a steamer to transport the students to and from it, at the beginning and end of the school term.

A fine location has been obtained for the school, embracing a tract of upwards of 700 acres of land, with three miles of shore line, lying upon the opposite side of the lake and at a distance of about four miles from the village of East Machias. It can be reached either by the highway, running around the southerly and easterly side of the lake and forming the easterly boundary of the property, or by water, from the old sawmill located at the outlet of the lake on a branch of the East Machias river.

The land is diversified, embracing both highlands and lowlands, forest and field. It has both sandy and rocky shores on the lake, a large island, and many bold and beautiful points running out into the lake. The location is sufficiently far north to give cool nights almost invariably, even though the summer days be warm.

air is cool and bracing, the water of excellent quality, and the conditions as a whole are all that could be desired.

The site selected for the camp is ideal, being a high and narrow ridge terminating in a long point running out into the lake. Located about seventy-five feet above the surface of the lake, open toward it on both sides of the ridge and toward the hill country beyond it, it stands in a commanding position, while the well-wooded end of the point gives pleasing variety, and a natural screen for some of the necessary structures. Facing the lake and the prevailing winds, built upon a ridge, consisting largely of sand and gravel, sloping in three directions, hygienic conditions are perfect, for it is proposed to take the water supply from the end of the point, to dispose of the sewage upon the rear of the ridge, to establish the wharf and bathing beach in front, in proximity to the camp, and to locate the boat house in a protected bay or cove in the rear.

It is proposed to build a long, low building, one story in height for the greater part of its length, in which shall be located the assembly room, drafting room, dining room and kitchen, with perhaps two small lecture rooms and office, and servant's quarters. Beyond and near to this building will be an ice house, cold storage room and provision storehouse. Adjacent to it on the hillside, a small fireproof building to house the instruments and to furnish a camp store, will be constructed. The camp proper will be built in a half moon on the southerly side of the main building, of walled tents, with floors, and a small hospital building will probably be located at some convenient point at a safe distance from it. A small water tank, furnishing running water and limited fire protection, will probably be built under the shelter of the spruce trees at the north of the camp, to which water will be pumped from the pumping station and filter plant, or driven wells. located upon the point. A wharf, with separate superstructure which can be removed during the winter season, will be built upon the water front, for the convenience of the camp, for the use of the boats in all except the heaviest weather, and as a convenient place for bathing. The boathouses will be built in a more protected cove on the east of the point, at which the boats may land in stormy weather.

The preparation of final plans will be undertaken shortly with a view to beginning construction during the early fall, so that the



CHARLES W. EATON, '85
Who has given \$10,000 to the Summer School of Civil Engineering

camp equipment may be available for use in the summer of 1912.

The committee calls the attention of Institute men to the charming character of Gardner Lake and to the fact that many available sites for summer camps are to be had upon it on reasonable terms. It is to be hoped that a number of Institute men will be led to build summer homes or camps upon this lake.

How, it may be asked, has it been possible for the Institute of Technology to make provision for the purchase of such a splendid site and equip such a summer school, in the face of so many other pressing needs? Through the keen personal interest and generous impulses of two of her loyal alumni. The first of these, who has preferred to remain unidentified, volunteered to purchase the site and to equip the camp, and another alumnus, Mr. Charles W. Eaton of the class of '85, generously came to the front with a further contribution of \$10,000, toward the buildings required by the camp. It will, therefore, be possible for the committee to turn over to the Corporation of the Institute not only the site, but funds for the complete equipment of the summer school camp.

This sketch of the steps leading to the establishment of a permanent summer school of engineering for the Massachusetts Institute of Technology would not be complete without a brief reference to the splendid spirit of cooperation which has made it possible. While the committee has been deeply interested in the project, the actual work of investigation and planning has fallen in largest measure upon the different members of the civil engineering department,—particularly upon Professor Robbins, though valuable service has also been rendered by Professors Allen. Spofford, Burton, Hosmer, Breed and Barrows. The negotiations. leading to the purchase of the twelve different parcels of land involved, have been conducted by Mr. Geo. F. Cary, assisted by the late Mr. E. P. Gardner, both residents of East Machias. To the latter public-spirited men, who for the good of future generations of students, and for the interest of their town, have done this exacting and difficult work, as a labor of love, the Institute is much indebted.

The happy conclusion of this the first effort of the Alumni Council to cooperate with the Corporation to the advancement of the Institute should be a stimulus to Institute men for further endeav-

ors on behalf of their Alma Mater, and there can be little doubt that this summer school will justify the fondest hopes of its promoters and be a vital force in developing the student body, and building up a wholesome Technology spirit.

LEONARD METCALF '92.

#### The Institute to Benefit

A recent news despatch states that the will of the late Dr. Charles G. Weld of Boston and Brookline, Mass., whose property is said to amount to several million dollars, was filed in the Newport Probate Court, Newport, R. I., June 28. Several public bequests are made.

Doctor Weld's estates in Brookline and Boston go to Brookline and Boston, respectively, for the purpose of public parks. A trust fund of \$100,000 is left to George Walker, who is to receive \$5,000 annually. Upon Mr. Walker's death the fund goes to the Boston Dispensary. A relative, Elizabeth D. Freeman, receives \$4,500 yearly from a trust fund of \$125,000. Upon her death the money is given to the Boston Lying-in Hospital.

The Boston Museum of Fine Arts receives all of the late Doctor Weld's Japanese paintings, swords and gold works. The Peabody Museum of Salem, Mass., is given all of his property now in its

possession and \$25,000.

All of the property Doctor Weld left his wife will go to his children upon her death. When they die, the property is given to the Massachusetts Institute of Technology and the Massachusetts General Hospital.

#### New Associate Members

The following former students were elected associate members of the Alumni Association on the date indicated:

May 5, 1911: Matthew M. Blunt, '86; Alberto M. Bombrini, '11; Sherwood Hall, Jr., '08; Maurice Ernest Harris, '10; Charles Pray Holland, '92; Albert Kimball Huckins, '10; Richard Franklin Morgan, '96; Roger Leavitt Rice, '06; Harry Alexander Robertson, '10; William H. V. Rosing, '82; Charles McLean Smith, '10; Walter Talbot Spalding, '10.

### **GRADUATING EXERCISES 1911**

Two hundred and fifty-four degrees conferred—President Maclauren's address to the graduating class

The Commencement exercises at the Institute were held in Huntington Hall on the afternoon of June 6.

Two hundred and fifty-four degrees were conferred; 232 bachelors of science, twenty masters and two doctors. The degree of doctor of philosophy was conferred upon Eugene Clarence Howe, A. B., S. B., of Brooklyn, and that of doctor of engineering upon Reginald Lamont Jones, S. B., M. S., of Los Angeles. Twenty students who had taken the fifth-year course received the degree of master of science.

President Maclaurin addressed the graduates as follows:

"The academic year that ends with these exercises will be memorable to a much larger group of Institute men than to the class of 1911, or to that section of it that is about to be enrolled in the great army of Technology alumni. Much has happened within the year to show that Tech is at last coming into its own, and that the pioneer work that it has accomplished in the realm of education is now appreciated at its true value.

"Two months ago the fiftieth anniversary of the granting of our charter was made the occasion of an impressive manifestation of the spirit of Technology. Prominent alumni came from all parts of the Union to demonstrate their loyalty to their Alma Mater and not merely to take part in social functions, but to contribute to serious discussion of those problems vitally affecting the health, prosperity and general well-being of the community. Perhaps, however, the most gratifying feature of those celebrations was the evidence that they afforded of the deep interest of the business world in the work of the Institute and of the general good will towards Technology amongst almost all sections of this community.

"That interest and good will was also strikingly manifested throughout the protracted consideration of the Institute's claim for a continuance of support from the State, and Technology would certainly not have gotten what she did had it not been for the fact that in every quarter of Massachusetts, men representing the most diverse opinions—social, political and religious—came forward to advocate her claim. And while the Commonwealth has stood behind the Institute at this critical period there has been so much other evidence of substantial support that we are being told, on all hands, that this is preëminently the day of Technology, so that we can have no more doubts as to the establishment of that New Technology, the building of which has been a dream for long. All these tokens of appreciation and of good will are of course extremely gratifying and encouraging, but no one who has caught the spirit of Technology, would think for a moment that we are going to spend much time in mere exultations. This public and private approbation will be regarded by every Tech man as a challenge to continue activity and an incentive to the Institute to keep on doing its best to serve society honorably and well.

"The year that is just closing has been marked by material gains for the Institute, but unfortunately these have been offset by irreparable spiritual losses. The number of women students here has never been large and it is so small today that there is not a single woman in the graduating class. None the less, the influence of woman has been potent in our midst. The Institute owes much indeed to the courage, enthusiasm and high purposes of Mrs. Richards, more than the students of today can possibly realize, to the quiet spirit and influence of Mrs. Rogers, whose spirit compelled loyalty and devotion to the highest aims of every member of the Faculty and of the alumni body that had an opportunity of appreciating it. The New Technology is to be enriched by the generosity of Mrs. Rogers and of the friends of Mrs. Richards and even more, I hope, by the memory of their whole-hearted devotion to the highest interests of the Old Technology.

"And now, gentlemen of the graduating class, the time has come when you are to pass out into the great world with the hall-mark of the Institute's approval. See that under all circumstances the metal rings true. If your ears have been properly attuned during the past year, you cannot fail to have heard something of what it really means to be a graduate of this Institute—what it means, not only in the standards of professional honor and skill that you are expected to maintain, but in the limitless demands upon your spirit of self-sacrifice. Yours is the first class to graduate in the second half century of the Institute's history and it

may be that you will feel that the New Technology begins with you. If this is so, it will fall to you to set the standard for your successors and to make it evident to the world that the new has lost nothing of what was the best in the spirit of the old. Your training here will give you splendid opportunities of usefulness, not only to yourselves but to others. Do not neglect the claims of public duty.

"Whether you are Massachusetts men or not, always remember that you owe much to this grand old Commonwealth, which has contributed largely to your education, and, I hope, breathed into you something of its fine spirit. Carry its great traditions out into the world and go forth strong in the assurance of sympathy and of interest from all who have watched your progress during the years that you have been within these walls, and of the kindly welcome and generous help that you may count upon everywhere from any one of the ten thousand alumni of this Institute now scattered throughout the world. The fact that you have passed successfully through the severe ordeal of the Institute's course proves that you have moral and intellectual qualities that should stand you in good stead everywhere. If you are to be really effective in the world a long struggle still lies before you and in that struggle, Corporation, Faculty and alumni unite with me in wishing you all success."

The conferring of degrees was the final exercise in the hall. Taking a prominent part in the exercises was Kanezo Goto of Tokyo, Japan. Goto is a lieutenant in the imperial Japanese navy and has seen active service in the war between Russia and Japan. Goto was stationed on the flagship during the battle of the Sea of Japan.

At Technology Goto's thesis was "The Design of a Curtis Steam Turbine." Before coming to the Institute he received the degree of mechanical engineer from the Imperial Polytechnic Institute. He is also a graduate of the engineering college, Tokyo, Japan.

The degrees conferred were as follows: Doctor of philosophy, 1; doctor of engineering, 1; master of science, 20; bachelor of science—civil engineering, 46; mechanical engineering, 49; mining engineering and metallurgy, 17; architecture, 10; chemistry, 12; electrical engineering, 49, biology, 1; physics, 1; general science, 2; chemical engineering, 19; sanitary engineering, 15; naval architecture and marine engineering, 6; electro-chemistry, 5.

#### HUNTINGTON HALL FRIEZE RESTORED

Decorations entirely by Technology students are said to have no parallel in the history of such work—Five classes contributed

The frieze of Huntington Hall, which the architectural department undertook to restore some five or six years ago, has now been completed. The spectator can hardly credit the statement that the work has been done entirely by the students of the department. Although the work has been divided up among many individuals, there is a remarkable uniformity about the treatment and drawing of the different subjects. The frieze now presents a series of thirty-one decorative panels done by twenty-eight students, the figures in the sketches being life size. They vary in width from seven feet to nearly twelve feet some of them representing single figures and others large groups.

The history of the panel decorations in Huntington Hall is an interesting one. The old frieze was ordered in 1870, and was drawn by Paul Nefflen, an artist born in Würtemberg. In 1898, during some improvements in the hall, the original pictures were painted or washed out, and for a number of years the panels

remained empty.

In 1905 a plan was formed for restoring the decoration, it being suggested that the work might be done by the students themselves. For the past six years, each member of the succeeding fifth year class in architecture has availed himself of the opportunity of furnishing one of the panels. It should also be mentioned that the "landscape architecture" panel was supplied by a young woman student, Miss M. K. Babcock. The complete list is as follows:

South wall (which the audience faces)—Chemistry, W. B. Kirby; mining engineering, J. A. Kane; mechanical engineering, F. Nickerson; the potter, A. H. Jacobs; seal of Technology, H. W. Rowe and M. H. Goldstein; sculpture, George M. Magee; surveying, L. C. Clark, Jr., and F. M. Chace; the

miner, J. McF. Baker; architecture, A. N. Rebori; electrical

engineering, C. L. Pitkin.

West wall—The carpenter, F. A. Burton; commerce, K. E. Carpenter; building, R. I. Batchelder; weaving, F. A. Burton; free-hand drawing, C. F. Baker; ship building, K. E. Carpenter; iron casting, J. F. Mohn.

North wall (back of the hall)—Indian, J. F. Alter; steel ship building, R. Kibbey; the two spandrils, A. F. Menke; research,

E. I. Williams; the Puritan, J. F. Alter.

East wall—Fine casting, W. F. Dolke, Jr.; concrete mixing, C. C. Ford; landscape architecture, Miss M. K. Babcock; fisheries, W. H. Davis; glass blowing, C. C. Ford; shoe making, J. H. Scarff; the potter, K. E. Carpenter.

# Technology Suite at the New York Chemists Club

It will interest Tech men to know that chemists of New York have just completed a new club house on 41st Street, just back of Hotel Belmont. It is an eleven-story structure, the lower portion being devoted to the social side of the club and the upper stories for analytical, commercial and research work. The point of particular interest to Tech men is the fact that the club contains a Technology suite, the funds for which were contributed by Institute men. David Wesson, '83, 26 East 29th Street, New York City, is chairman of the M. I. T. committee. The other educational institutions represented are Harvard, German Universities, Columbia, Princeton, New York University, Yale, University of Pennsylvania, Swiss Universities, Cornell, University of Michigan, Johns Hopkins, British Universities, College of the City of New York, University of Virginia, University of Tokyo, and Western Universities.

Dr. William T. Sedgwick, professor of biology in the Massachusetts Institute of Technology, gave the commencement address at the Worcester Polytechnic Institute on "Science and the State."

#### GIFT OF \$10,000 FOR SUMMER SCHOOL CAMP

The Institute has recieved a check for \$10,000 from Charles W. Eaton, '85, for the purpose of constructing permanent buildings for the summer school of civil engineering at Gardner Lake near East Machias, Me. Mr. Eaton who took the course in civil engineering is well acquainted with the needs of the department as he was for a time an instructor at the Institute soon after leaving Technology. He is now a dredging contractor in the work of improving harbors, having recently finished a large contract in Porto Rico. Another recent work was the dredging of the new harbor for the Danish government in the Lesser Antilles. Mr. Eaton is a good friend to the Institute, realizing the value his education has been to him. His previous gift was a loan scholarship which is so arranged that the money can be used in a quiet way without even the necessity of applying for it. The fund is placed in the hands of a member of the faculty in whose judgment he has the utmost confidence.

## Newton Scholarship Fund

Salmon W. Wilder, '91, chairman of the Newton Technology scholarship committee, in an address before the Newton High School recently announced the establishment of a scholarship at the Institute of Technology to be awarded to a pupil of that school. The scholarship provides the tuition fee for one year at the Institute. The award of this scholarship is to be made by the school committee of the city of Newton on the basis of the general merit and promise of the student. This scholarship is intended to be a distinction which shall be attractive to any young man preparing for the Institute and it is to be independent of pecuniary need. The recipient may, however, at his option retain the title without the grant.

#### CLASS DAY EXERCISES

At the class day exercises held June 5, a handsome copy of the Technology seal, executed in bronze by Bela L. Pratt, was presented to the Institute, by the class of 1911. It is of heroic size and follows closely the official seal of the Institute, differing, however, in some minor parts. The seal was presented by W. C. Salisbury, of Chicago. Irving W. Wilson of Bloomington, Ill., class statistician, stated among other things that the average age of the class on entering the Institute was eighteen years and eleven months, and at graduation, twenty-three years and eight months. The average weight of the class is 151 pounds; height five feet nine inches. The amount spent for tuition was approximately \$250,000. average expense of the members of the class from September to June, \$775, making the amount spent in Boston by the class of 1911, \$1,100,000. Donald R. Stevens of Brookline, was president of the class and Theodore D. Parker of Allston, first marshal. Peter D. White of New York City was gift orator; the class history was read by R. H. Ranger of Indianapolis, Ind., and O. B. Denison of South Framingham was class prophet.

## Tech Night at the Pops

There was much merriment and good feeling at Symphony Hall on the evening of June 6, the occasion of the annual Tech Night at the Pops. The number of Tech men on the floor was not as large as usual but the galleries were crowded with friends of the alumni. Many of the classes held dinners previous to the concert, and marched to the hall in a body.

The class of 1911, led by Pres. Donald R. Stevens, which arrived soon after eight o'clock, was greeted with vociferous cheering and was presented with its alumni banner by President Noyes of the Alumni Association.

#### TEXT OF THE TECHNOLOGY BILL

Following is the full text of the resolve appropriating \$100,000 a year to the Institute from the treasury of the Commonwealth, for a period of ten years:

Resolved, That there shall annually be paid from the treasury of the Commonwealth to the Massachusetts Institute of Technology, for the term of ten years, beginning the first day of January in the year nineteen hundred and twelve, the sum of one hundred thousand dollars, to be expended under the direction of the Corporation of said Institute for the general purposes of the Institute: provided, however, that the payment for the year nineteen hundred and seventeen and for the four following years shall be conditioned upon the presentation of satisfactory evidence to the Governor and Council that the said Massachusetts Institute of Technology has received, by bequest or gift from other sources, the sum of one million dollars in addition to all the funds held by it on the day of the approval of this resolve. In consideration of the said payments and during the continuance thereof, the Massachusetts Institute of Technology shall maintain eighty free scholarships to be granted by the board of education to residents. or minor children of residents of Massachusetts who, upon examination conducted under such rules and regulations as the President of the said Institute may prescribe, shall be found to possess the qualifications fixed for the admission of students to the Insti-Two such scholarships shall be available annually for properly qualified candidates from each senatorial district, but if there be less than two properly qualified candidates in any senatorial district, such number of scholarships, less in amount than two from each district, may then be distributed by the board of education among the other senatorial districts. Candidates for these scholarships shall make application to the board of education before the first day of July in each year, and shall forward to that board the approval in writing of the senator from the district in which the candidate resides. In awarding the scholarships preference shall be given to properly qualified candidates who are otherwise unable to bear the expense of tuition.

All acts and resolves and parts of acts and resolves heretofore passed authorizing the annual appropriation of funds by the Commonwealth for the maintenance of free or state scholarships in the Massachusetts Institute of Technology, or prescribing the conditions under which such scholarships shall be awarded, are hereby repealed.

The Massachusetts Institute of Technology shall transmit each year copies of the annual report of its President to the general court.

The eighty half-scholarships now in force, as shown by the records of the Massachusetts Institute of Technology, shall continue in full force and effect until the end of the course for which they were given, after which time all future scholarships shall be filled under the regulations and conditions herein prescribed. [Approved May 20, 1911.]

## To Purify New York Harbor

The report of Col. William M. Black, Engineering Corps, U. S. A., and Prof. Earle B. Phelps, '99, of the Massachusetts Institute of Technology, who, as a special commission for the Estimate Board of New York City, have investigated the pollution of harbor waters by sewage, has been submitted, and as a result of its recommendations the Estimate Board has empowered the mayor to appoint a committee of five city engineers to establish a standard of water purity on a firmer basis of fact than now exists. The committee is to submit plans also for the rearrangement of sewer exits wherever this may be found necessary.

Colonel Black and Professor Phelps report that their investigations have convinced them that the amount of dissolved oxygen in the harbor waters, which furnishes the most satisfactory criterion of the purity of these waters, should not be drawn on to an extent which shall reduce it below 70 per cent. of the full saturation value. They estimate that if sewage could be concentrated at the Narrows and Throgs Neck, this standard of purity could be maintained until such a time as the population of the entire district shall reach 7.4 millions.

#### ADDRESSES WANTED

The alumni office has no addresses for the names below. Will the readers of the Review kindly furnish any they may know.

Daniel Wheelock Willard, '70.—James Austin Knapp, '75.— Francis T. Sargent, '75.—Harry H. Campbell, '79.—Loring R. Miller, '80.—Frank C. Morrison, '82.—Charles Lincoln Burlingham, '86.-Harry Baker Merriman, '86.-Elwood Justin Wilson, '86.—Fred Ropes Young, '86.—John Stites Ray, '88.—Charles Henry Warner, '89.—Francis William Dunbar, '90.—George Warren Favor, '91.-Clement March, '91.-George Albert Merrill, '92.—Hamilton Otis, '92.—Russell Selfridge, '92.—Nathaniel Rutherford Craighill, '93.-Nathan Coleman Winslow Chapman, '94.—Herbert Edward Johnson, '94.—George Owen, '94.—Allan Percy Brown, '95.-John Winfield Cooke, '95.-George Reuben Howarth, '95.—Andrew Jeffries Logan, '95.—Charles Thomas Bramhall, '97.-John Watson FitzGerald, '97.-Warren Augustus Rooke, '97.—George Kellogg Newbury, '98.—William Graves Smith, '98.—John Howard Adams, '99.—John Albert Flemings, '99.—Gardner Manning Gale, '99.—Harry Wales Goldthwaite, '99.—Lee Rosenberg Loveman, '99.—Carl Leon Morgan, '99.— Warren Adams Edson, '00.-William Gardner Pigeon, '00.-Eugene Stillman Foliambe, '01.—Alberto Primitivo Gonzales, '01. -Lewis Winslow Horne, '01.—Otto Gerhard Luyties, '01.—Leslie Eaton Merrill. '01.—Sumner Ives Smith, '01.—Fred Bibber Webster, '01.—Lester Clark Hammond, '02.—Pierre Barbeau Pendill, '02.-Wade Lyndon Wetmore, '02.-Herbert Clemens Burdick, '03.—Charles Francis Gardner, '03.—Frank Johnson, '03.—John Larrabee Jones, '03.—Harold Osborn, '03.—Horace Gardner Simpson, '03.—Irving Ellwood Adams, '04.—John Winfrid Ager, '04.—George Martin Bates, '04.—Allan Seymour Courtney, '04.— Henry Philkins Drake, '04.—Charles Ashley Hardy, '04.—Henry Levine Lyman, '04.-William Donaldson Murray, '04.-Hersu Schapira, '04.—Frank Joseph Severy, '04.—Theodore William Steidemann, '04.—Charles Francis Underhill, '04. — Thomas Breckinridge Cabell, '05.—Edward Chester Grant, '05.—

/ Elliott Lum, '05.— Harold Carlyle Mitchell, '05.— Lovell Hallet Parker, '05.— Leon Murray Pease, '05.— Arthur Morton Cheney, '06.— Angelo Tilton Heywood, '06.— Charles McKay Huntington, '06.— Hans Otto Carl Isenberg, '06.— John Edward Murphy, '06.— Clarence Brewster Powell, '06.— Nestor Manuel Seiglie, '06.— Louis Arnett Thompson, '06.— Walter Hayward Trask, Jr., '06.— Juan Francisco Urquidi, '06.— John Hanger Link, '07.— Kenneth Camm Boush, '08.— Utar James Nicholas, '08.— Edward Michael Savage, '08.— Milton Stanley Clark, '09.— Chauncey Howard Crawford, '09.— Valerio Masjoan, '09.— Richard Frederick Goodwin, '10.

## Changes in the Faculty

Announcement was made the latter part of June that Prof. Gaetano Lanza, who for twenty-eight years has been in charge of the mechanical engineering department of the Institute, would remain professor emeritus, and that Prof. Edward F. Miller, '86, of the department of mechanical engineering would be acting head of the department.

Professor Miller has conducted the course in practical steam engineering for twenty years. He has been engaged in many steam problems, and is the author of a number of technical bookand articles in engineering papers. The Corporation also announs ces the following promotions: Associate Professor G. N. Lewis, appointed professor of physico-chemical research; Associate Professor E. B. Wilson, professor of mathematics; Selskar M. Gunn, assistant professor of biology and public health; William T. Hall, assistant professor of chemistry; R. S. Williams, assistant professor of chemistry: W. Felton Brown, assistant professor of drawing; Harold A. Everett, assistant professor of naval architecture; Assistant F. L. Hunt, instructor of physics; Assistant F. G. Perry, instructor of electrical engineering; Assistant J. J. Eames and Assistant W. H. Jones, instructors of mechanical engineering; Assistant E. L. Connolly, instructor of inorganic chemistry; Assistant Ludwig Rosenstein, instructor of theoretical chemistry; Assistant R. E. Gegenheimer, instructor of industrial chemistry; Walter W. King, from assistant to instructor in physics.

#### LOCAL ALUMNI ASSOCIATIONS

Great Interest in the New Technology Club of Japan— Technology Club of New Hampshire formed at Manchester—New York Club forging steadily ahead—New Officers of Northwestern Association.

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TECHNOLOGY ASSOCIATION OF JAPAN.—I thought the Review would be interested in learning that the first meeting of the Technology men of Japan was held at the Kojunsha Club, Tokyo, on April 13, 1911. The occasion was a dinner given for me by Dr. Takuma Dan, '78, and Stejiro Fukuzawa, '88, to which a number of other Technology men were invited. Everyone seemed very much interested in what I had to tell them of Technology and Technology's plans, so much so that at the conclusion of the dinner it was voted to form the Technology Association of Japan. Doctor Dan was chosen secretary and treasurer of the new organization and it was decided to start active work with the view of increasing the influence of the Institute in the Orient.

The men present included, Doctor Dan, '78, director of the great Mitsui enterprises in charge of their mining interests, which are the most extensive of any in Japan; Fukuzawa, '88, who not only publishes the Jiji Shimpo, one of the most important newspapers of the country but, with his brother, owns and conducts the Keio University, a private institution founded by his father, which boasts of over four thousand students; Heiichiro Maki, '93, well known for having built the first electric railway in Japan, as well as having promoted other important enterprises and Eiichiro Honma, '74, who went to the Institute in 1870 before there was a transcontinental railroad, and who, therefore, had to make the journey by way of San Francisco and Panama, being over fifty days in transit; Viscount Torii, '84, who looks after Technology's interests in the upper house of Parliament, was unable at the last minute to come to the dinner but sent his regrets, as did a number of others.

Frederick W. McIntyre, '02, of the Western Electric Company and T. I. Chapman, '94, of the Standard Oil Company, were the only two Americans besides myself who were present. I have never been to a Technology dinner where more genuine enthusiasm was shown. This argues well for the future success of the Technology Association of Japan.—Jasper Whiting, '89.

Technology Association of New Hampshire.—At a meeting of Technology alumni living in the vicinity of Manchester, N. H., June 27, it was voted to form a Technology association of New Hampshire and the following officers were elected: A. W. Thompson, '96, president, N. S. Bean, '94, vice-president; G. S. Gould, '07, secretary-treasurer; A. Fisher, Jr., '06, chairman of the executive committee. On this committee are the officers and M. L. Bullard. Every man who ever went to Tech is invited to notify G. S. Gould, secretary and treasurer, superintendent of the counter factory of the W. H. McElwain Company of Manchester.

The meeting was held at the Intervale Country Club, the following men being present: Arnott, '75, Robbins, '86, Clough, '91, Bean, '94, Thompson, '96, Gould, '03, Roberts, '04, Thompson, '96, Gould, '05, Robbins, '86, Clough, '91, Robbins, '91

son, '04, Thompson, '05, Fisher, '06, Davol, '07, Gould, '07, Robbins, '07, Albro, '08, Belcher, '08, Collins, '08, Hall, '08, Bullard, '09, Caldwell, '09, Reynolds, '09, Clough, '10, Lord, '10, and Lawrence, '10. In the company, nine are married, fourteen are single, three are soon to become benedicts and five are fathers.

The chairman of the executive committee was authorized to receive subscriptions from corporations and public-spirited citizens of the state of New Hampshire to raise annually \$2,500 to be used by the principal of the high school of Manchester to send the brightest high school graduate in the state to some college for three years and to M. I. T. for two years following, \$500 to be used by each man each year for five years for this purpose. There are to be two meetings each year.—G. S. Gould, '07, Secretary-Treasurer, 102 Webster Street, Manchester, N. H.

TECHNOLOGY CLUB OF NEW YORK.—The second anniversary of occupancy of the attractive club house at 17 Gramercy Park was celebrated Friday evening, May 19, by a smoker night arranged by Mr. Howes, '03, at which a goodly gathering of Tech men enjoyed some rollicking songs, dances and banjo and guitar music furnished by irrepressible black boys. About fifty men were at dinner and by eight o'clock the evening's program began. Doctor Maclaurin sent a letter of congratulation and good wishes and regretted his inability to attend. After about an hour of jollity and an opportunity to absorb the beer and lemonade and refill pipes, the president of the club, Mr. King, made a birthday address referring to the opportunities now afforded by the club. its popularity for class dinners, and the plans contemplated for improvement and development requiring only the co-operation of New York men to avail themselves of the advantages of the club and unite in the general movement of the alumni in creating a New Technology.

Within a week news reached the club of the signing of the bill appropriating the money desired by the Institute from the State and of Mr. duPont's generous gift, and forthwith a message of congratulation was sent to him signed by a large number of the members of the club.

The club also received a cordial but late invitation from the Philadelphia Club to play ball at its field day, May 27, but we were obliged to decline as so many of our men had planned to be out of town over Decoration Day. We still look forward to an

opportunity to touch up the "Phillies" on their own grounds. Training quarters have been established in the out-of-door dining room, now reopened, which affords the pleasantest place in New York for summer time repasts. The chairman of the house committee is furnishing such delectable meals in the aforesaid place, however, that we fear our men will put on so much weight that Philadelphia will have a walk-over.

The board of governors is already anticipating an unusual and successful annual banquet next year. The date has been annual as January 21, 1912. VanR. Lansingh has been made chairman of the committee. It is to be called the New York State dinner of Tech men.

The nominating committee for next year has already been appointed, and consists of Walter B. Trowbridge, '92, chairman; G. U. G. Holman, '86; J. Parker B. Fiske, '89; C. A. Meade, '94, John P. Bacon, '97, Allston Sargeant, '98, G. I. Rhodes, '05, and C. F. Shaffer, '10. This committee will have seven months to receive suggestions in regard to candidates for election to the board of governors at the annual meeting, February 4, 1912.

George W. Kittredge, '77, is chairman of our committee to suggest names of candidates for term membership on the Corporation and also for officers of the Alumni Association.

F. C. Schmitz, '95, chairman of the membership committee, announced that up to June 7, 522 members had been elected.—Walter Large, '79, Secretary, 15 William St., New York, N. Y.

Northwestern Association of the M. I. T.—The most important recent event was the annual meeting of the association which took place at the South Shore Country Club, June 17. Notwithstanding the inclement weather, there was a good crowd out and these were fully repaid as it cleared up finely in the afternoon. The main feature of the afternoon was a ball game between the "Dressmakers" on one side, captained by Dick Schmidt, '87, while the "Drunken Sailors" had for their chieftain Lonsdale Green, '86. It is to be understood at the beginning that this was not baseball; it was the spectacular game known as indooroutdoor baseball, and the game in question was most momentous as it was played for the championship of the Northwestern Association.

There was much feeling in regard to the decisions of the umpire

and the under-current of wrath was not confined to any particular side. It is recorded that Green's side won, although the score was very close with twenty-three home runs which were made in the last inning before the scorer's arm got tired. Banash and Sturm were pitchers for the "Dressmakers" and both were knocked out of the box. We never did learn who was the pitcher for the "Intoxicated Tars," but have an idea that he was a "ringer." All the old members of the association were out and a great many new ones. The game was well worth the price of admission.

The annual election which took place at this meeting resulted in the following board of officers: R. E. Schmidt, '87, president; Lonsdale Green, '86, vice-president; John M. Frank, '07, and Kenneth Lockett, '02, executive committee. The secretary-treasurer is elected for two years so that the present incumbent has still another year to serve.

At the meeting, Copeland, '76, who was present at the Congress of Technology, described the condition of affairs at the Institute and stated that never in the history of Technology had it been in such fine condition for carrying on its work and expanding its usefulness.

The association has just issued a new directory of its members which will be found very useful.—Meyer J. Sturm, '96, Secretary, S. 704, 84 La Salle Street, Chicago, Ill.

PITTSBURG TECHNOLOGY ASSOCIATION.—The American Society for the Promotion of Engineering Education holds their yearly meeting in Pittsburg during the week beginning June 26. It is proposed to hold a "College Reception" in the foyer of Carnegie Institute the evening of Thursday, June 29, where the alumni or undergraduates from the various colleges may have a reunion to meet the professors of their respective institutions. There is great hope of having a goodly representation of Technology men for this occasion.

The friends of Waldso Turner, '01, former secretary-treasurer of the Pittsburg Alumni Association, will be glad to know that he is again able to be about after a protracted illness of over three months. Mr. Turner is general manager of the Iron City Engineering Co., Pittsburg, Pa.

On Thursday, May 25, Luther K. Yoder, M. I. T. '95, with the Jones & Laughlin Steel Co., was a guest at luncheon in "The House" of the Marguerette Morrison School, in connection with the Carnegie Technical Schools. Following the luncheon Mr. Yoder lectured to the junior class on how the methods of modern scientific management in the business world can be applied to the management of the home, with special relation to household accounts. This lecture was a part of the course in the distribution of income for which the class has been scheduled during the year.

Review of Work of Pittsburg Alumni Association for Season 1910–1911.—The association has a membership of 160, comprising all graduates and special students of Tech in Pittsburg and vicinity, covering a radius of thirty miles. The association has passed through a successful season both socially and financially. The program during the past year consisted of two smokers and the annual dinner. The smokers were held during May and November, 1910. The May smoker provided a talk by George R. Wallace, '81, on "The Commission Form of Government for Cities." Since Pittsburg has finally secured a commission form of government, it is pleasing to report that our association was active in the movement to secure this much-needed and desired legislation for the city.

The November smoker was a grand jollification meeting of "Tech boys" and our congenial past president, Sumner B. Ely, '92, officiated as "Keller the Magician" and no better performance could have been wished for.

Our Guarantor's Association continues to be the mainstay of our financial success, since our regular yearly dues are but \$1.00, and has provided funds whereby the association is able to give the smokers entirely free of charge. Luncheon and "the things that go with it" are always on hand, and our plans have worked so successfully that we are glad to recommend the plan to other associations.

Our annual dinner was held on the memorable night of April 11th. It was a grand love feast, and marked the beginning of a new era in Technology interest everywhere.

Sumner B. Ely, '92, was an honor guest at the banquet of the Worcester Polytechnic Institute held at the Fort Pitt Hotel, Pittsburg, June 1. Mr. Ely spoke of the allied interests in technical education and the very friendly feeling existing between the sister institutions.—L. K. Yoder, Secretary-Treasurer, 634, Maryland Ave., Pittsburg, Pa.

TECHNOLOGY CLUB OF ROCHESTER.—Although the REVIEW published a short article in the May number concerning the dinner of the Rochester Club on April 11, the secretary believes that a little further information on the same subject will not be amiss. The local papers, particularly the Rochester Democrat and Chronicle, treated the club very kindly, publishing two articles, one on Sunday, April 9, of over half a column, and the other on Wednesday, April 12, of a column. The articles were considered as local news and referred principally to the dinner of the club.

The attendance was the largest we have ever had, the following men being present: F. O. Rich, '13, M. Lyman, '90, O. R. Adams, '06, C. C. Culver, '96, A. F. Sulzer, '01, Eisenhart, '07, E. H. Packard, '07, W. G. Bent, '05, F. A. Cole, '91, J. F. Ancona, '03, F. W. Lovejoy, '94, A. S. Crocker, '97, H. H. Tozier, '96, H. O. Stewart, '09, M. Hogle, '01, O. K. Foote, '84, B. C. Hopeman, '00, W. E. Hoyt, '68, H. Alserly, '09, C. F. Wray, '98, E. M. Hawkins, '98, J. C. Dryer, '99, L. F. Myers, '03, V. E. Lacy, '99, Dr. Rush Rhees and Roland B. Woodward, secretary of the Rochester Chamber of Commerce, being guests of the club.

The club was very fortunate in having Doctor Rhees for a guest, for in addition to being president of the University of Rochester, and therefore interested in the Congress of Technology, Doctor Rhees has an engaging personality and is a well-rounded and finished after-dinner speaker. Speaking without notes, he held the attention of his audience every second. A number of facts were presented in a way that probably the average Institute man would not think of and the Doctor's arguments on these points were very conclusive.

The subject was on technical education, references to two German schools being used to illustrate two different ideas of developing the student; the growth of technical education and the need of correlation of cultural studies or training. Doctor Rhees attributed the fame and success of Tech in a large measure to the services of men of broad cultural training such as Presidents Rogers and Walker. In conclusion he indicated that cultural training should increase engineering or technical efficiency.

Mr. Woodward's entertaining talk was concerning the duty of technically trained men to interest themselves in the development of the communities in which they live. Mr. Woodward has been a vigorous worker along these lines and his service for the Rochester Chamber of Commerce is becoming well known.

The president, Mr. Hoyt, read several extracts from a letter he had received from his classmate, Professor Richards, that were very interesting.

The dinner was most successful from all standpoints and the club members think that they assisted as far as they were able on such short notice to celebrate the fiftieth anniversary of Technology. Mr. Lovejoy is to be congratulated on the fine dinner arrangements. No meetings are scheduled at this date and there is no news of importance, but unquestionably some gathering will be arranged during the summer or early fall.—J. F. Ancona '03, Secretary-Treasurer, 190 Birr Street, Rochester, N. Y.

Technology Club of Puget Sound.—We have had no meeting of the club since April 11, at the time of the Congress of Technology. We expect to have a luncheon, however, on Saturday, July 8, in honor of ex-Governor Draper, '78, who is touring in this part of the country. Matters will be somewhat quiet during the summer but in September there will be a meeting for the election of officers with some kind of entertainment. The first active year of the association has been on the whole a very successful one and the interest appears to be sufficiently awakened to insure a profitable season for 1911 and 1912.—L. A. Wallon, '04, Secretary, The Seattle Electric Company, Seattle, Washington.

THE CINCINNATI M. I. T. CLUB.—In the May number of the Technology Review the regular weekly luncheon of our club was listed as Thursday, which is incorrect. Please take notice that Tuesday is the day and any Tech man in Cinncinnati on that day will be welcomed with open arms.

All our attention is now being given to the summer outing which will probably have taken place by the time this issue is published. These festivities are becoming, more and more, the events to be looked forward to with fond anticipation. It is hoped that this year's baseball game will surpass the famous contest of last year. No spectator will ever forget that thrilling experience. Our only trouble is to secure an efficient and durable umpire. The increasing numbers of the younger members in the club is serving to put new life into the organization, which had to a considerable extent become a sort of "ancient and honorable" affair. With

the addition of the younger element the interest in the Institute has been growing and this has been helped by the monthly news coming to us through the Review.

It will be desirable, during the coming season, to make efforts to interest young men preparing for college in the advantages of Technology. It is proposed to start the winter season with a series of social evening meetings, one feature of which will be the presence of ladies, a feature of which we are very proud.

At a recent minstrel show by the employees of the Proctor & Gamble Company, Ray Allen, '09, sometime of the Tech show, distinguished himself again as one of the most humorous of end men.—Stewart R. Miller, '07, Secretary, 3366 Morrison Avenue, Clifton, Cincinnati, Ohio.

Women's Association of the Massachusetts Institute of Technology.—The last business meeting and tea of the season was held in the Margaret Cheney Room, Friday, May 5; Miss Kenney and Miss Manning hostesses. Miss Dodd, acting president, presided at the business meeting. Miss Dodd outlined for those present the responsibilities which now devolve upon the association owing to the recent death of the honored president, Ellen H. Richards. The organization can no longer be content with social gatherings only. The members and indeed all former women students are urged to take a greater interest in the activities of the association.

Miss Susan Minns, recently appointed member of the Naples Table Association from the Massachusetts Institute of Technology, to succeed Mrs. Richards, gave an interesting account of the work of the association and of its recent meeting at Smith College. Mrs. Lord then gave some interesting personal impressions of Mrs. Richards and after active discussion of ways and means the meeting adjourned.—Mildred E. Blodgett, '07, Corresponding Secretary, 72 Ashford Street, Allston, Mass.; Elizabeth B. Babcock, '09, Recording Secretary, 102 Crawford Street, Roxbury, Mass.

Washington Society of the M. I. T.—The Washington Society of the M. I. T. held its twelfth annual banquet on the seventeenth of April at the Arlington Hotel, with forty-four present. After the dinner, which proved to be a good one, Dr. A. A. Noyes, '86, president of the Alumni Association, gave us a résumé of the late happenings in Boston. Rear Adm. E. V.

Endicott, U. S. N., retired, who had been a guest at the Congress of Technology the week before, spoke next; then Mr. Melville Church, president of the Patent Law Association of Washington; and finally Prof. Henry E. Clifford, '86, of Harvard University. All the speeches were short and to the point. Each speaker had a message, and each message reached every man present. The needs of Technology that are not met by the present resources were especially emphasized.

On Sunday, May 21, the society participated in an engineers' excursion to the new hydro-electric plant at McCall's Ferry, Pa. Our society, the Washington and Baltimore sections of the A. I. E. E., Washington Society of Engineers, and the Engineers' Club of Baltimore, were each represented by a delegation, the total attendance reaching 175. A special train was furnished for the trip. On arrival at the plant at noon, a box lunch was served from the baggage compartment. The day was warm and there was a rush for the barrels full of cracked ice and cold bottles of The officials of the power company acted as ginger ale and soda. guides, and everybody saw everything. They even took us into the "Chamber of Horrors," where the live 70,000-volt bus bars are located. The plant will have an ultimate capacity of about 100,000 k.-w. Power is transmitted at 70,000 volts to Baltimore. forty miles away. The dam is of concrete, sixty feet high and half a mile wide, backing up the river water for eleven miles. On account of the low head (fifty to sixty feet) the generators run at the comparatively low speed of 94 r. p. m., and as a result the fields of the 10,000-k.-w. machines are over twenty-seven feet in diameter.

At half past three, after we had walked miles and had asked yards of questions, the locomotive began to make a noise as if it were getting restless, so we climbed on board and were taken back home. It was a trip that was thoroughly enjoyed by all.—D. G. Haynes, '09, Secretary, 312 Patent Office, Washington, D. C.

TECHNOLOGY CLUB OF MINNESOTA.—During the past year local alumni have showed a great deal of interest in the Minnesota Club and Technology in general. The club was organized in 1903 and has done very little since that time but hold annual dinners and meetings.

The enthusiasm shown at the recent Congress has even reached

us out here, however, and several of the members have taken an active interest in the work of the club, and their suggestions have proved very helpful to the officers.

As a result of this activity, literature has been placed in the architect's clubs of both St. Paul and Minneapolis, as well as in the public libraries of those cities. Steps are now being taken for holding an exhibit in the rooms of the Minneapolis Architects' Club of some of the work of Technology architectural students. The Twin City high schools have been supplied with literature and several names of prospective students have been received by the secretary.

During the past two years very strong "Technical Clubs" have been formed in Minneapolis high schools,—similar to the engineering societies at the Institute. These clubs hold frequent meetings which are addressed by local engineers and professors of the high schools and University of Minnesota. On Saturdays the club members usually visit some plant and during the winter the larger club, enrolling some ninety members, visited ten or twelve of these manufacturing establishments.

The local alumni held their annual banquet on April 11, a description of which was given in the May issue of the Review. At that time steps were taken to hold regular dinners and lunches. A circular letter from the secretary on this subject received prompt attention and resulting letters were very gratifying. It was felt by the executive committee, however, that, owing to the proximity of the summer season and the consequent removal of many of the members to the surrounding country, that the plan should not be put into effect until September.

The club plans to work up the scheme of regular gatherings as strongly as is practicable, and everyone here is making "Publicity" the proposition for which he is working.—Clifford C. Hield, '10, Secretary, 1674 Hennepin Ave., Minneapolis, Minn.

SAINT LOUIS SOCIETY OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY.—This society had its first jollification since its organization at the Glen Echo Country Club, on Wednesday, May 24, in the shape of a cold spread at seven o'clock followed by refreshments on the piazza. It was a very hot night in town, but that only gave the boys a larger initial thirst and consequent greater capacity for enjoyment on their arrival. Those present

were H. B. Graham, '99, E. L. Barkhouse, '97, J. M. Perkins, '01, A. M. Holcombe, '04, W. W. Karnan, '08, E. L. Brown, '08, and R. E. Blankenbuehler, '09. After doing full justice to the entertainment provided by our host, E. A. Manny, 1887–8, we wound up the evening by all piling into Graham's invincible Oldsmobile, three deep and returning to town in as decorous a manner as is customary.

The Friday lunches at the St. Louis Lunch Room, Fourth and Locust streets, will be continued for the present, and any visiting Technology man may look for a welcome there between 12.30 and 1.00 p. m. any Friday.—Amasa M. Holcombe, '04, Secretary-Treasurer, 510 Pine St., St. Louis, Mo.

### Doctor Daly on the Canadian Geological Survey

Dr. Reginald Daly of the Institute of Technology has been engaged by the Canadian geological survey to do special research work in Canada this summer. Doctor Daly will take charge of a party which will begin the geological mapping of a cross-section of the Rocky Mountains, following the main line of the Canadian Pacific Railway, a task that will probably take ten years to complete. The first cross-section along the international boundary line was completed in coöperation with the United States geological survey three years ago. The work is of vital interest to geologists all over the world as throwing light on some of the basic problems of modern geology.

### Doctor Dewey, Editor

The first issue of the American Economic Review, published by the American Economic Association and edited by Prof. Davis R. Dewey of the Institute, has recently made its appearance. This new quarterly which takes the place of the Economic Bulletin, covers a wide range of thought and it is the aim of its editors to make the publication a craftsman's tool. In its last number about forty books were reviewed and there are two hundred and fifty entries of periodicals.

## TECH MEN IN THE PUBLIC EYE

Selskar M. Gunn, '04, instructor in the Department of Biology and Public Health at the Institute, has been secured by the Milwaukee Bureau of Economy and Efficiency, the new economic board of the socialist administration, to take charge of the investigations of present health conditions and to work out a final reorganization of the health department. Mr. Gunn has obtained leave of absence from the Institute and will not return until September. He has been connected with the Boston Board of Health, the Iowa State University and the Iowa Board of Health. For two and a half years he served as health commissioner of Orange, N. J., and during his administration the death rate decreased from 16 to 13 per 1,000. Mr. Gunn is one of the editors of Science Conspectus published by the Society of Arts of the Institute.

Charles H. Woodbury, N. A., '86, who is the subject of an article in a recent number of the *International Studio*, New York City, has few equals as a maker of water colors. His best-known works are pictures of the ocean in its varied moods. His best known picture entitled, "Mid-Ocean," created a profound impression when it was shown in New York a few years ago at the National Academy exhibition. After Mr. Woodbury was graduated from the Institute, he studied in Paris and Holland. He has many medals including one from the Paris Exposition in 1900, the Pan-American at Buffalo and the St. Louis Exposition. His home is near the village of Ogunquit, Me. In 1899 he was elected to membership in the Society of American Artists and in 1897 received full academic honors of the National Academy of Design.

Morris Knowles, '91, formerly chief engineeer of the Bureau of Filtration of Pittsburg, has been appointed director of the department of sanitary engineering and public health in the School of Engineering at the University of Pittsburg. This course will be laid out under the direction of Mr. Knowles to co-operate with the Medical School of the University and the departments of health of the city and state. Under the co-operative system in operation at the School of Engineering, the students will receive

a year's practical work during their course. It is proposed under the direction of Mr. Knowles to develop one of the most advanced courses in sanitation and public health in the country.

WILLIAM C. CUSHING, '87, has recently been elected president of the American Railway, Engineering and Maintenance of Way Association. After leaving the Institute he entered the service of the Pennsylvania Railroad and has served in various capacities on that road up to the present time. He has been engineer of maintenance of way on the Cincinnati & Muskingum Valley Railway and the Indianapolis and Pittsburg divisions of the Pennsylvania lines. In 1901 he was made superintendent of the Pittsburg division and a year later was appointed superintendent of the eastern division. In 1903 he was promoted to his present position, that of chief engineer of the southwest system. Cushing served in 1910 as a delegate to the International Railway Congress. He is a member of the American Society of Civil Engineers, the American Society for Testing Materials, the International Society for Testing Materials and the Société des Ingénieurs Civils of France.

GEORGE C. WHIPPLE, '89, of the firm of Hazen & Whipple, sanitary engineers of New York City, has accepted an appointment as professor of sanitary engineering at Harvard University, connected with the graduate school of applied science. Mr. Whipple is one of the most prominent sanitary engineers in the country and has a wide reputation as a lecturer and author on technical subjects. After leaving the Institute he became associated with Desmond Fitzgerald of the Boston Water Department and had charge of the biological laboratory at Chestnut Hill for eight years. During the latter part of that time he was consulting engineer of the city of Lynn. He went to Brooklyn in 1896 and established a laboratory there similar to the one he had been conducting in Boston. When Brooklyn became a part of Greater New York, Mr. Whipple had charge of the examination of the water supplies of the metropolis and his investigations led to the selection of the Catskill water supply which is now being used in that city. Mr. Whipple has also made thorough studies of the tidal conditions of the Hudson river and the sewage disposal in New York harbor, the effect of the sewage of Chicago on the water supply of St. Louis, the water supply of Jersey City, an investigation for the New Jersey state sewerage commission of the disposal of wastes from gas works, of typhoid fever epidemics at Waterville and Augusta, Me., and Cleveland, and has published monographs on typhoid fever, pure water and other subjects related to sanitary engineering. For two years Mr. Whipple was a lecturer at the Massachusetts Institute of Technology and he has given lectures also at Dartmouth College and Columbia, Cornell, Lehigh and McGill universities. Since 1904 he has been consulting professor of water supply and sewage disposal at the Brooklyn Polytechnic Institute and has given occasional lectures and exercises there.

WILLIAM J. ROBERTS, '91, has been appointed state highway commissioner of Washington, and will take up his duties immediately, with headquarters at Olympia. Previous to his appointment he was practicing as consulting engineer on municipal improvements, with an office at Medford, Wash. Since his graduation from the Massachusetts Institute of Technology in 1891 he has been engaged in a variety of municipal works, principally in the Northwest. This has included service as city engineer of Colfax, Wash., for three years, and later the design and supervision of construction of sewers and water-works systems for a number of small cities in that state and Idaho. During a part of this time he was also associate professor of civil engineering of the Washington Agricultural College and School of Science, and was sanitary engineer of the Washington State Board of Health.

Henry N. Atwood, '05, has astonished the country during the last month by his airship flights from Boston to New York and thence to Washington. His flight from Boston was so timed that he arrived in New Haven at the time of the Harvard-Yale boat race. His air-feat became the talk of the country, more particularly because of his daring flight over the sky scrapers of New York City, which has never before been attempted. Mr. Atwood is a pupil of the Wrights and is connected with the Burgess-Wright school at Squantum, Mass.

C. Howard Walker, '99, formerly of the department of design at the Boston Museum of Fine Arts, and a lecturer at the Institute of Technology, has recently been honored by election to associate membership in the National Academy of Design, New York, his membership representing architecture.

EARLE L. OVINGTON, '04, thrilled the people of Boston in June, when he made spectacular trips in his Blériot monoplane from the Waltham aviation field over the city of Boston, circling the state house and many public buildings. Ovington was a student of the aviation school at Pau, France, and is one of the most daring manipulators of the aeroplane in this country.

Carl P. Pomeroy, '10, has been appointed bacteriologist of the city of Plainfield, N. J. Mr. Pomeroy was graduated from Bates College before coming to the Institute. He has been connected with the Board of Health of Lewiston, Maine. The Board of Health of Plainfield is now ready to take up research work which will be conducted by Mr. Pomeroy.

EMORY S. LAND, '07, has been assigned to the post of Bureau of Construction and Repair at Washington, D. C. After being graduated from the United States Naval Academy, Instructor Land took a two years' course at the Institute from which he was graduated in 1907 when he became assistant naval constructor in the New York navy yard.

Chin Yu Wen, '08, who holds the degree of bachelor of science from the Institute and subsequently took a master's degree at Technology, has recently received the degree of doctor of philosophy from Columbia University. He is to return to China to become the head of a new university which will be conducted along the lines of American educational institutions.

CECIL H. PEABODY, '77, in charge of the department of naval architecture and marine engineering at the Institute, has been selected as a delegate to the jubilee meeting of the naval architects of Great Britain from the American Society of Naval Architects and Marine Engineers of which he is a member of the council. The meetings are to be held in London, July 3–8, and will constitute virtually an international congress, as invitations are extended to the societies of the United States, Germany, France, Italy, and Japan.

WILLIAM T. CARPENTER, '07, has recently been appointed general bacteriologist of the Cincinnati filtration plant.

## PUBLICATIONS OF THE INSTITUTE STAFF

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C. B. Breed. American Civil Engineer's Pocket Book, Section 2, on Surveying and Railroad Location. New York. p. 1380. Size of Vol. 12mo.

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- G. N. Lewis and Merle Randall. The Heat Content of the Various Forms of Sulphur. *The Journal of the American Chemical Society*. Vol. 33, p. 476. (pp. 12.) April, 1911.
- G. M. J. MACKAY. Transference Experiments with Mixtures of Potassium Chloride and Sulphate in Aqueous Solution. *The Journal of the American Chemical Society*. Vol. 33, p. 308. (pp. 11.) March, 1911.

RICHARD C. MACLAURIN. Educational and Industrial Efficiency. Science. January 20, 1911.

RICHARD C. MACLAURIN. The Reform of Oxford. North American Review. March, 1911.

RICHARD C. MACLAURIN. The Outlook for Research. The Pedagogical Seminary. March, 1911.

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- M. I. T. Bulletin of the M. I. T. Reports of the President and Treasurer. Boston. Vol. 46, p. 166. Size 8vo. No. 2. 1911.
- M. I. T. Bulletin of the M. I. T. Summer Courses, 1911. Boston. Vol. 46, No. 1. Extra number. p. 21. Size 8vo.
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- ROBERT H. RICHARDS. Hindered Settling Classifiers. Engineering and Mining Journal. February 25, 1911.
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# Tech Winner at Glider Meet

At the first intercollegiate glider meet which was held at the Atlantic Aviation Field, on Memorial Day, by the Harvard Aeronautic Association, the Technology glider operated by P. W. Dalrymple, '11, won the distance event with a flight of 653 feet. Technology had two gliders, Tech I, and Tech III, Tech I, being operated by E. N. Fales, '11.

Tufts received first prize for mechanically controlled gliders; Technology for body controlled gliders and Cornell for general control in flight. The Harvard glider could not be made to leave the ground.

## MISCELLANEOUS CLIPPINGS

The past week has registered two more important losses, that of Mrs. William Burton Rogers, widow of the founder and first President of the Institute of Technology, and Frederick Porter Vinton, one of this country's foremost portrait painters. Both of these representative figures, who belong to two distinct generations, will be sadly missed in this community.

Mrs. Rogers, who was well past eighty-five years, was truly a remarkable woman, beautiful to look upon, gracious and charming in manner and beloved throughout this land as the "mother of the Technology," whose graduates made her their annual toast and returned with interest the affection which she cherished for every Technology boy. In passing, she leaves almost her entire wealth to this Institute with which she had been so intimately associated, but it will be long before any financial gain can prove compensation for the loss of one who had been the leading personality in the life of this institution.

In 1853, her husband, Professor Rogers, resigned his professorship at the University of Virginia and came to live in Boston where he at once began to develop his plan for that "comprehensive polytechnic college" which in 1861 became the Massachusetts Institute of Technology. When Professor Rogers became exhausted by overwork and the prolonged struggle to carry on the new and almost friendless "Institute," it was his faithful wife who nursed him through a terrible illness and by her untiring devotion made it possible for him to again take up the work. Once more he grasped the helm and piloted the new "Institute" safely through stormy seas, and into calm waters; then having accomplished this noble work he fell dead at his post in 1882, on Commencement Day, upon the platform in Huntington Hall. He was succeeded by the late General Walker, who also rendered splendid service to the then rapidly growing institution.

Mrs. Rogers shared all of her husband's earliest plans and dreams for the Institute and in the thirty years which elapsed since his death, she became identified with its every interest. From her father, the Hon. James Savage, the accomplished genealogist, she inherited a strong and original mind and an intense love of accurate scholarship while she shared her husband's overwhelming enthusiasm for science. And after he became president of the National Academy of Sciences—perhaps the highest distinction obtainable by any American scientist—Mrs. Rogers repeatedly entertained that dignified body during its meetings in Boston, while her acquaintance with foreign men of science was to the end extraordinarily extensive. Her home in this city, as well as her home at Newport, was, like that of Mrs. Julia Ward Howe, a center of culture and educational interest and her generous hospitality to her Technology boys will long remain a precious memory in the vicinity which knew her best and loved her most.—Hartford Courant, May 27.

The death of Mrs. Ellen H. Richards calls attention to the fact that one generation has seen the recognition of women in the realm of applied science. Mrs. Richards took a degree at Vassar College in 1870. She was known there for her

practical ability and straightforward simplicity. Whenever she was praised she was wont to protest that she did only what the average New England girl could do.

After her graduation she was the first woman to apply for admission to the Massachusetts Institute of Technology. The faculty granted her request, although one professor opposed the plan. Five years later he married the student to whose admission he had objected, and her friends laughingly congratulated her on one more conquest for the average New England girl!

For more than twenty-five years Mrs. Richards was instructor of sanitary chemistry at the Institute of Technology. She became an expert in water analysis, in the chemistry of food, in practical sanitation, the cost of living and the prevention of fire loss.

She was made a trustee of Vassar College when the board was about to install what she knew was an antiquated system of sewage disposal. Almost before the gentlemen realized what was happening this woman had converted them to a plan for a sewage farm—a triumph for up-to-date, applied science.

A scholar of high ideals, she was never dry-as-dust in her methods. "There is no reason," she would say, "that proper food should not taste good, and that right living may not be enjoyed in a pretty house." She practiced what she preached.

This "average New England girl" won a national reputation, and she was also a devoted wife, a loyal friend, a "mothering" teacher, and a good homemaker. The span of her life saw a combination of the scholastic and the domestic virtues made possible for a woman, although her description of herself as "the average girl" was far too modest, so varied and so many were her parts and powers.—

Youth's Companion, April 27.

We are reminded of the youthfulness of the Institute of Technology when we learn that the widow of the founder, William Barton Rogers, died in Boston only last evening. In a sense Mrs. Rogers was herself the maker of the Institute, for although for a few years after her marriage in 1849 to Professor Rogers of the University of Virginia she lived at Charlottesville, her husband in 1853 resigned his professorship and they removed to Boston, making their home on Temple Place with her father, Hon. James Savage, the accomplished genealogist of "The Genealogical Dictionary of New England." The leisure which was now his gave Professor Rogers time to develop and carry out the plan conceived by him much earlier for that "comprehensive polytechnic college" in Boston which in 1861 became the Massachusetts Institute of Technology. And when her illustrious husband sank into a long and terrible illness, exhausted by the early struggles of the new and almost friendless Institute, it was Mrs. Rogers who as a watchful and devoted wife, with all a woman's love and more than a woman's protection, eventually and fortunately brought him back to that measure of health which enabled President Rogers to take the helm once more and pilot the Institute safely through the stormy seas of the late seventies into the calmer waters of 1882, when he gave way to his chosen successor, General Walker, and, worn out, fell dead on Commencement Day upon the platform in Huntington Hall.

Sharing her husband's earliest dreams and plans for the Institute, familiar with every phase of its history, sensitive to everything touching its honor and its reputation, proud of its achievements, jealous of its independence, Mrs. Rogers, without children of her own, made sons and daughters of the Institute. And as she

outlived her husband a score of busy years she became so identified with its every interest as to embody in her charming and vivid personality its history, its spirit, its very being. Born as she was of the noblesse of New England and bred among the best traditions of Boston, she was naturally associated with some of its finest spirits and attached by choice, by native ability and by mother wit, to many of the best people of her time. Hence it came to pass that Mrs. Rogers was a notable figure wherever she went, and the leading personality in the life of the Institute.

From her father she inherited a strong and original mind and a profound love of accurate scholarship, while with her distinguished husband she shared a veneration for science which amounted almost to a passion. Only those who had the privilege of her close friendship and knew her home life on Marlboro street in Boston and at "Morningside" in Newport, realized how much mingled kindness and gayety dwelt beneath her social stateliness or how ardent was her attachment to the higher and nobler ideals of life and mind. Until advancing age forbade, she was hospitality itself to the ever passing host of Institute students and teachers. And after her husband became president of the National Academy of Sciences—perhaps the highest distinction obtainable by an American scientist—Mrs. Rogers repeatedly entertained that dignified body during its occasional meetings in Boston, while her acquaintance with the foreign men of science of her time was really remarkable.

This is no place to speak of Mrs. Rogers's personal charm or of her loyalty to all good works such as flourish in the soil of Boston more luxuriantly than in many other places, but the Instructive District Nursing Association, the Widows Society and numberless other public and private charities held her constant and individual interest and were aided by her benefactions. It was given to her, as to very few men or women of her time, not only to have lived in a notable circle throughout the whole Victorian Age but, so far at least as America is concerned, to have been able to say of it—what her modesty would never have allowed her to say—Quorum magna pars fui.—William T. Sedgwick, Boston Transcript, May 19.

Historiometry.—This term has been invented by Dr. Frederick Adams Woods of the Massachusetts Institute of Technology, to designate what he hopes will become a new branch of exact science, devoted to the solution of historical problems. To illustrate his method, attention may be called to his table representing relative degrees of "eminence" among the white population in America. Some states, and some sections, he shows, have produced more eminence than others far beyond the expectation from their respective populations. "In this regard," he says, "Massachusetts always leads, and Connecticut is always second." He then goes on to point out that "New York gives a trivial though constant excess above the expectation." From here southward the ratios drop off suddenly, but "for South Carolina the ratios again rise and exceed the expectation." Doctor Woods has applied his tests to ancient and foreign history, and found equally curious results. He thinks that such researches promise a method of penetrating "the tangled and perplexing jungle known as philosophy of history."—Youth's Companion.

The remarkable work done by the Massachusetts Institute of Technology in Boston is known all over the world. The fiftieth anniversary of this great institution was lately held. This work was begun by Professor Rogers, who had a perfectly clear aim in beginning it. Some might have thought that Boston with its many great institutions fifty years ago, was hardly the place to begin so radical a departure as "The Boston Tech." Rogers held to Lowell's maxim that "new times demand new manners and new men," and as a corollary from this that "new conditions demand new schools." In discussing the matter with others Professor Rogers laid emphasis upon "the value of science in its great modern applications to the practical arts of life, to human comfort, and health, and to social wealth and power." A great principle in this development of practical science was set forth as the "importance of being useful." To bring this about the leading note of the scientist was "the dignity of the practical professions." Modern education is recognizing the fact stated by Goethe "that a man never can learn to know himself by thinking but by doing." Carlyle quite agreed with this when he said that "the end of man is an action and not a thought, though it were the noblest." The Massachusetts Technical Institute deserves all the compliments being paid it for it has been a veritable seed bed of practical and higher knowledge.—Free Press, Winnipeg, Man.

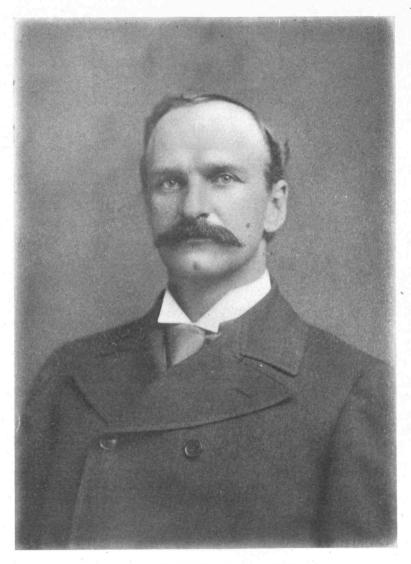
## **BOOK REVIEWS**

Class of '77, Massachusetts Institute of Technology. A Directory of the Class with Biographical Notes. Cloth,  $6\frac{1}{2}$  by  $9\frac{1}{2}$  inches, pp. 168; Illustrated.

This directory of the class is handsomely printed and contains pictures of nearly every member of the class, with ample biographies. Most of the biographies are accompanied by pictures of the subject, during his Institute days and at the present time. The compilation of this book took nearly three years and was carried through with great credit by the secretary, R. A. Hale. The book was printed by Edwin W. Davis, a member of the class.

THE 1910 YEAR BOOK OF THE RHODE ISLAND CHAPTER, AMERICAN INSTITUTE OF ARCHITECTS, published by the Chapter, Providence, R. I., in connection with its annual exhibition. Size, 8 x 10½; pp., 196, profusely illustrated.

This catalogue contains a number of exhibits of the work of Technology architects. Among them are J. Howard Adams, '99, John H. Cady, '06, Prescott O. Clark, '94, E. F. Ely, '82, E. B. Homer, '85, Howard Hoppin, '76, Wallace E. Howe, '92, Walter Kilham, '89, and several others.



GENERAL T. COLEMAN DU PONT, '84
Who has given the Institute \$500,000 toward the purchase of a new site

## NEWS FROM THE CLASSES

1868.

PROF. ROBERT H. RICHARDS, Sec., Mass. Inst. of Tech., Boston Mass.

The secretary had an interesting letter from Stuart M. Buck early in the year in which he writes that in February he left New York with his wife and younger daughter for Bermuda and after a short stay left for the Isthmus by way of Antilles, where he was visiting his eldest daughter at the time of writing. He writes that the progress made on the canal since his visit has been something wonderful, especially on the lock construction and the Gatun Dam. He was fortunate in being there at the time of the Civil Engineers' excursion and took several trips with them. Buck occupies part of his time in consulting engineering of a confidential character.— Ellery C. Appleton wrote from Wadesboro, N. C., about the middle of March stating that he had been there since September, 1909. in charge of the construction of the southern end of the Winston-Salem South Bound Railroad, where it connects with the Atlantic Coast Line, which operates it, making a through route from the West Virginia coal fields to Charleston. He expected to be through with the work there in a short time and planned to take up some work of a similar character in the Carolinas. He writes that he has bought a ten-acre farm near Jacksonville, Fla., which he will occupy when he is through with active engineering work. Appleton has taken much interest in church work and has been superintendent of the Sunday School there for some months.-A letter from W. P. G. Hayward which was written early in February shows his great interest in Technology by his desire to join the alumni association and become identified with the good work the alumni are doing. He was expecting to take a trip to southern California late in February with the possible view of locating there if he can find what he wants.-Carson wrote the latter part of March saving that he had been away since early winter, engaged in professional work and in arranging his winter quarters at North Augusta, S. C.-Eli Forbes wrote that he was pursuing the even tenor of his way in Lancaster, where he has a little to do with the banks in Clinton and is clerk for one or two charitable institutions. Music is his principal resource when he cannot be doing outside things. He anticipates going to California if all goes well. He tried curling last winter and recommends it as a healthful exercise. He is just as interested in Technology and everything pertaining to it, as ever.

Dr. Robert H. Richards, head of the department of Mining and Metallurgy at the Institute, has been elected an honorary member of the American Institute of Mining Engineers.

### 1881.

Frank E. Came, Sec., Metcalfe Apartments, Westmount, Quebec, P. Q.

Don't think that '81 is dead because nothing appears in the Review about it—we are modest. One of the members wishes to record the very pleasant renewing of ties in the New York Technology Club, recently experienced. After an absence in foreign lands of several years the lure of Alma Mater brought him in where Abbott watches the treasury and keeps out a glad hand for rural members as well as dues.—Abbott, Brown and Barnes enjoyed a foretaste, a couple of times, of the larger affair at the time of the 50th anniversary.—Allen and Norris also get around occasionally.—French too is a member. The men of the "Oughts" look "Oh my!" when '81 is mentioned, but the democracy of the New York club makes us feel like two-year-olds, no matter how we look.

## 1882.

Walter Bradlee Snow, Sec., 170 Summer Street, Boston, Mass.

The following members of the class were in evidence at the dinner or elsewhere on the occasion of the Congress of Technology: Cheney, French, Gooding, Jenkins, Munroe, Snow and Walker. —After occupying the same office on Devonshire Street, Boston, for exactly twenty years, Alfred L. Darrow removed on June 1 to No. 8 Beacon Street, Boston.—Walter H. Hersey was rendered unconscious by collision between auto and motor truck some time since, but reported soon after that he was getting along all right. The recent dedication of the completed portion of the Cathedral Church of St. John the Divine in New York carries the memory of the class back to the lamented Heins, as does also the following quotation from a recent issue of The American Architect: "It is not so easy to realize that twenty years have passed, and twenty years' steady work has been done, since, in the final competition, the design of two youths, associated under the firm name of Heins & LaFarge, was preferred above the designs of their elders for the cathedral of the Protestant Episcopal Church to be erected on Morningside Heights on the island of Manhattan. It was only the heavy laden committee of the diocese, clerical and lay, and its professional advisers, architectural and engineering, who had direct knowledge of the bewildering variety and multiplicity of designs submitted, whether invited or volunteered. But it is well within many recollections that four designs only survived the successive siftings of the three sieves, and were submitted in a public or quasi-public exhibition to the comments of such as had any comments to make on them, comments again invited or volunteered on the chance that such comments might furnish some rays of illumination."

### 1883.

HARVEY S. CHASE, Sec., 84 State Street, Boston, Mass.

Edmund W. Kingsbury, one of the artists of the class, held an exhibition of his water colors in April at the gallery of Charles E. Cobb, Boston. There were fifty works in the collection, among them some very excellent bits of landscape, and some fine effects in sea scenes, painted from Mount Desert, Jamaica, Florida, Italy, and also from Framingham where Kingsbury lives. His "Old Spanish Steps Jamaica" was especially admired.

#### 1884.

HARRY W. TYLER, Sec., Mass. Inst. of Tech., Boston, Mass-

In connection with Professor Bardwell's removal to Cleveland, he lunched by invitation with the following members of the class at the Technology Club on Tuesday, June 20: Messrs. Adams, Doane, Gill, Mellen, Prescott, Puffer and Tyler.

#### 1885.

I. W. LITCHFIELD, Sec., Mass. Inst. of Tech., Boston, Mass.

The annual dinner of the class was held as usual the Saturday evening before Easter which occurred April 15, at the University Club. Those present at the dinner were Richards, Pierce, Little, Morss, Spaulding, Ames, Brown, Litchfield, Osgood, White, Eaton, Steele, Plaisted, Talbot, Bartlett and Doctor Schubmehl. Whenever the class of '85 get together there is never any need of a premeditated program and the annual dinner this year was as varied in its features and as entertaining as any of those of the past. Charles A. Brown, the retiring president, was ably assisted by Tenney White whose fund of reminiscence seemed The members of the class were seated about a large round table, sixteen covers being laid. Tenney was unavoidably called away before the dinner was over but he had hardly gone when our own Bates (M. E.), who has never before been able to meet with the class, arrived from New York, and assumed Tenney's place. Arthur Plaisted was elected president for the coming year. There were a number of interesting and delightful features of this dinner of 1911 and one of them which was entirely personal will

be remembered by the secretary when other things are forgotten. There are many wonderful things in this world, but from one standpoint at least, the fine spirit of the class of '85 and the relations of its members to each other is the most beautiful of all. —Charles R. Allen is now located in Boston at the office of the State Board of Education in the Ford Building. He is agent for the State Board of Education in the department of industrial education. His residence is 3 Dana St., Cambridge.-At the instigation of Alex McKim, a few of the '85 men in and about New York, dined at the Technology Club, 17 Gramercy Park, June 22. The event of the evening was the presence of Sid Williams, who has been unable to meet with us at our dinners and reunions in New England. A photograph of Sidney with his hat on would show little if any change during the years that have elapsed since he was at Tech. The other men present were McKim, Mahon, Richards, Dewson, Mears and Litchfield. tainment committee of the Technology Club, hearing that the '85 men were to have a blow-out on the 22d, celebrated the event by appointing a smoker for that evening, which was largely attended. The open air dining room at the club is a comfortable and delightful place to take dinner. The Tech Club is adjacent to the Columbia Club and cheers and college songs were exchanged with its members who were dining in their open air pavilion next door .- Harry Barr, who is associated with the Lamson Consolidated Store Service Company of Boston, superintended the installation of the mail carrier which is used for transporting the United States mail in the great Pennsylvania terminal in New York City. The device is an ingenious one and presented many engineering problems which have been successfully solved.—One of the very interesting and satisfactory features of the class dinner in April was the announcement that Charlie Eaton had presented the president of the Institute with a check for \$10,000 for the purpose of erecting the buildings for the new summer school of civil engineering, at Gardner Lake, Me. Eaton has been very successful as a dredging contractor, principally in southern and West Indian waters; but this is by no means the first substantial evidence of his loyalty to the Institute.-Word has been received at the alumni office from the adjutant general's office of the U.S. A. at Washington, announcing the death of John T. Haines, who entered West Point after being with the class for a year. No particulars have been received.

#### 1886.

ARTHUR G. ROBBINS, Sec., Mass. Inst. of Tech., Boston, Mass.

The class of 1886 celebrated its twenty-fifth anniversary by a banquet at the University Club June 1, followed on the 2d by an automobile run along the North Shore and a shore dinner



CLASS OF '86 CELEBRATING ITS TWENTY-FIFTH ANNIVERSARY AT MARBLEHEAD

at the Devereux Country Club at Marblehead Neck. The post prandial exercises at the University Club consisted of the reading of many letters of regret from those whom business demands and distance kept away. Under the skillful guidance of Clifford, memories of incidents long since forgotten were made real by the word pictures of those who were not fortunate enough to avoid the glance of the eye of the toastmaster, and in the end all were ready to shout in the words of the inventor of the Hub, "Old time is a liar! We are twenty tonight." The automobile ride was through the Back Bay Fens past some of the proposed sites of the New Technology, through Cambridge, Medford, and along the North Shore to Marblehead. The shore dinner was served on the open piazza, and C. C. Peirce, acting as master of ceremonies, with his naturally graceful flow of language kept everybody deeply interested listening, and recounting their several experiences until late in the afternoon. A group photograph was taken on the steps of the "old town house" in Marblehead which reveals the members in their usual beauty. Thomas, secretary of '87, was the guest of the day. Unfortunately Litchfield, secretary of '85, could not join the celebration. Those present were: Aborn, Anthony Bartlett (D. P.), Blunt, Borden, Burgess, Chadbourne, Chase, Clifford, Cobb, Cutter, Duff, Hathaway, Higgins, H. A. Howard, Ingalls, Kimball, Merriam, Miller, Noves, Peirce, Proctor, Robbins, Shuman, Simpson, Whitney, Winsor, Richardson, Batcheller, Lloyd, Putnam, Locke, Foss.

# 1887.

## EDWARD G. THOMAS, Sec., Kewanee, Ill.

Your secretary has accepted the position of mechanical engineer of the Boss Manufacturing Company, of Kewanee, Ill. company manufactures, on a large scale, low priced cotton gloves such as are used by motormen, engineers, steam fitters, lumbermen and other workers, and has factories in several eastern and western cities.-John W. Stearns has become vice-president and manager of the Elevator Safeguards Company, 430 North Pennsylvania Street, Indianapolis. His company manufactures patented devices for preventing both the opening of elevator doors except when the elevator cage is at the proper level and the operation of the elevator machinery when a door is open. Many buildings in the West have been equipped and their owners are highly pleased with the safety of operation which the device assures. —The secretary recently stopped at Welland, Ont., for a call on Stoddard, who has been for a number of years manager of the plant of the Plymouth Cordage Company, making binder twine and rope of all sizes. The company has a large tract of land in addition to that occupied by the plant, and has built about one hundred cottages for its officers and employees, which are fitted with modern plumbing and heating and located in generous plots of land. The welfare of its workers is an object of constant attention, and kindergartens and a district nurse are provided. A large ball field equipped with a grand stand seating 2,000, lawn tennis courts and a clubhouse with showers, provide amusement; and in September, a grand field day of sports is held with an exhibition of flowers, vegetables, fruit and fancy work produced by the operatives. The rest of the property is cultivated, and Stoddard has twenty acres of wheat and as much in oats. In addition to all these duties, he is vice-president of the Welland Board of Trade, president of the Park Commission, and manager of the Welland County Agricultural Society.—Gulliver has recently undergone a severe operation at the Deaconess Hospital in Brookline, Mass., from which he is just now upon his feet again. He has been in somewhat poor health for a number of years, but is confident that this operation will restore him to vigor and health.

As a representative of '87, the secretary accepted the cordial invitation of the class of '86 to join them in an automobile ride and a shore dinner at the Cliff Club, Marblehead-one of the events of their 25th anniversary. The day was most perfect, the selected route covered the best of the unequalled North Shore roads, and the dinner, under the able direction of Arthur Anthony and Charlie Pierce was delightful. Every man was induced to speak and it was most interesting to hear from '87's one-time rivals but all-time friends, their recollections of student days, and their present life and duties. It was particularly to be noted that a large proportion of '86 men are administering affairs of large importance, are active in large corporations or have become men of public note. It seems obvious that the Institute training of our day, so frequently criticised as narrow, resulted, after all, in pretty broadgauge citizens. On behalf of '87, I thank our friends for their sincere hospitality and convey to them our best wishes that their 50th anniversary may be as successful.—Schmidt has been elected president of the Northwestern Alumni Association for the coming year. -John W. Adams, Jr., of St. Paul, Minn., son of our first class secretary, has been making a tour of the middle west and eastern colleges as captain of the University of Minnesota tennis team. They made a very creditable showing, winning a majority of matches played. The trip under the auspices of the college athletic association was an unusual tribute to the standing and popularity of the men comprising the team.—Sprague will be one of the technical members of a party which will make an automobile trip from Washington to San Francisco early in the fall, in the interests of the National advancement of good roads.

1889.

WALTER H. KILHAM, Sec., 9 Park Street, Boston, Mass.

Orrok is to lecture to the evening class at the Polytechnic Institute in Brooklyn, N. Y., on "Power House Engineering."-Five papers were contributed by '89 men to the Congress of Technology.—Huntoon's marriage to Miss Ida Hersey Vose at East Walpole, Mass., on April 18, last, is announced.—One of the pleasantest times which '89 has ever spent occurred at the plant of the Massachusetts Breweries Co., on April 11, at the invitation of G. R. Alley. After an hour spent in examination of the plant and the various processes of manufacture, the party sat down to an afternoon tea composed of delicious "hot dogs," sandwiches and the wine of the country, enlivened by conversation of unusual brilliancy even for '89. Fiske's partiality for the "dogs" was worthy of note.—Unity has the following from its issue of May 4, last: "Altogether it was a fitting anniversary of the Chicago Peace Society, which was inaugurated nearly two years ago and has been nourished into strength and worked into efficiency through the competency of its secretary, Rev. Charles A. Beals, whose removal here was a benign capture which robbed Massachusetts in order to enrich Illinois."-Whipple, now one of the most widely-known sanitary engineers in this country and of wide reputation as a lecturer and author on technical subjects, has accepted an appointment as professor of sanitary engineering at Harvard University, and will begin his duties with the coming academic year in the Graduate School of Applied Science.—Lewis writes interestingly as follows about the trip he and Mott made to Panama last spring:

We left New York in a cold northwest snow flurry and in about two days were enjoying most beautiful summer weather and smooth seas which followed us all the way. A twelve-hour stop was made at Jamaica, where we landed early in the morning at Port Antonio. After visiting this most attractive and tropical place, during the forenoon, we took the train for a ride across the island to Kingston. This ride was most fascinating as the scene was constantly changing between views of the ocean and the mountains, the tropical verdure and the native villages. We took the boat again in the evening at Kingston and after a charming sail across the Caribbean Sea landed at Colon just one week from New York. The party, increased by those who had come via New Orleans, numbered about one hundred seventy. A special train carried us across the isthmus to Ancon (Panama) where very comfortable quarters were provided at the Hotel Tivoli, the headquarters during our stay. From here by special or regular train the party went every day to visit and inspect some part of the great work. A most interesting and instructive ride was taken through the great Culebra Cut. It was also viewed from the banks from which the work of "making the dirt fly" was watched with great interest and one was impressed by the immense magnitude of the undertaking and with the vigor and push with which the work is being carried on. We walked over the great earth dam at Gatun which looks like one of the eternal hills which it joins at either end. The immense concrete locks at Gatun, Pedro Miguel and Miraflores were visited and closely examined. Here millions of cubic yards of concrete are being placed with great speed, at small unit cost, and with excellent results. A trip was made over the forty-six miles of the new Panama Railroad showing the tropical jungle, and the large cuts and fills giving us a better understanding of the great magnitude and the difficulties of the work. At Balboa, the Pacific terminus of the canal, we visited the five-mile Naos Island breakwater and the immense dump for the spoil from the Culebra Cut. Here we saw a nineteen-car spoil train unloaded and the spoil spread in a few minutes and also a track shifter, invented on the work, shifting track. One day we had a beautiful sail in Panama Bay, visiting Toboga Island, lying ten miles from shore. Here is maintained in the midst of very tropical scenery a sanitarium for rest and recuperation for the commission employees. But a short walk from the sanitarium lies the village of Tobago, whose history goes back about 400 years, and is a very old and strange-looking settlement. Ancon Hospital, situated on Ancon Hill in the midst of the most beautiful surroundings, was found to be very extensive and to rank with the most successful hospitals of the world. Our spare time was spent wandering through the city of Panama, where we found several old ruins and ancient churches. The President of the Republic of Panama gave us a reception and the Tivoli Club gave a reception and dance at the Hotel Tivoli. The trip was thoroughly enjoyed by all and we returned after a week's stay on the isthmus enthusiastic over the immense work the United States is doing so thoroughly, substantially and efficiently.

## 1890. George L. Gilmore, Sec., Lexington, Mass.

Charles Hayden was operated on for appendicitis in New York May 6. He was taken ill very suddenly the afternoon before and an operation was found to be necessary at once. We are very glad to report that he is now progressing finely and will soon be about as usual. Hayden is one of a committee named to work out the details of the coal, iron and steel merger in Alabama. This takes in the Alabama Consolidated Coal & Iron Company, the Southern Iron & Steel Company, and the Lake Borgne & Canal Company. The name of the new company is the Alabama Consolidated Coal, Iron & Steel Company.—Professor Calkins and family will spend the summer at their cottage at Woods Hole, Mass. Calkins will devote most of his time, when not on the golf course, to working in the government laboratory situated there. He reports the arrival of Gary N. Calkins, Jr., on Feb. 1.— J. B. Blood has been in Milwaukee for the past few weeks engaged in work for the Stone & Webster Company.—W. H. Johnson of Haverhill, Mass., is treasurer of the Cushnoc Paper Company, with mills at Augusta, Me., and an office in the Old South Building, Boston, Mass.-Winthrop Coffin, a special of the class of 1890, and now with the banking firm of Perry, Coffin & Burr, sailed for the Mediterranean on the Franconia in March.—W. Z. Ripley returned from a trip to Egypt early in April.—C. C. Babb is president of the Maine Society of Civil Engineers with headquarters at Augusta, Me.—Mr. and Mrs. Darragh deLancey have been spending the winter in California. In April they visited Mt. Wilson and saw the great telescope which Hale has in charge.— Mr. and Mrs. George E. Hale have been in Egypt the past few months where Hale has been taking a complete rest from his

astronomical work.—At the fiftieth anniversary reunion of Technology in April the following members of the class of 1890 were present at the smoker and banquet held in Symphony Hall: Atwood, Batchelder, A. F. Brown, Blood, DeWolfe, Eaton, Gilmore, Goodwin, E. Robinson, Royce, Richmond, Rogers, Simpson, Whitney.—Tech night at the Pops, June 6, DeWolfe, Rogers, Spaulding, White and Gilmore met at the Art Club and later went to the Pops where Bragg was the only other member of the class to appear.—February 24 at the meeting of the Buffalo Technology Club, Schuyler Hazard, formerly resident engineer for the New York Contracting Company, Pennsylvania Terminal, gave a talk on the New York City Terminal & Pennsylvania R. R., giving a general outline of the methods employed and the work performed by the contractors. The talk was illustrated with lantern slides and proved most interesting.—H. B. Burley is treasurer of the Boston Insulated Wire & Cable Company with a factory in Dorchester.—J. K. Noyes, who is chairman of the committee on highways of the county board of Brume County, New York, recently presented to the board a comprehensive report on the state of good roads construction in the county. The report received much favorable comment in the Binghamton papers.—Dr. Franklin W. White who has been giving a course of free public lectures on "Indigestion and Its Causes" at the Harvard Medical School is widely quoted in the Boston papers because of his valuable advice in regard to the proper selection of food. Doctor White has taken his life in his own hand as he has directed his guns at the immortal baked beans. "It is a fact worthy of special note," he says, "that beans so indissolubly connected with Boston's fame, are 'notoriously indigestible,' as are also peas, the reason being that they undergo fermentation in the stomach or bowels. If they are mixed with milk and made into a purée they become digestible," he said. "The longer vegetable foods are cooked the more digestible they are, but the longer meat is cooked the more indigestible it becomes. The most easily digestible foods that are nourishing are broths, gruels, milk, custard, soft-boiled eggs, sweetbreads, scraped raw beef, chicken and squab, toasted or stale bread, macaroni, and mashed or purée of potato. Among the foods hardest to digest are smoked or fried meats, sausages, pork, liver, fat meats like goose and duck, coarse vegetables like turnips, carrots, parsnips, tomatoes, cucumbers, lettuce, spinach, celery and even green corn. Pineapple and banana are bad, the latter being simply raw starch, like a raw potato. None of the above fruits or vegetables have any appreciable food value."

Miss Elizabeth E. Bickford is teaching school in California. Her permanent address is in care of her sister, Mrs. Eliza A. Bean, Orford, N. H.

Franklin Knight of New Haven has accepted a call to the

rectorship of St. Paul's Episcopal Church of Holyoke. He will assume his new duties in early September.

#### 1891.

Howard C. Forbes, Sec., 88 Broad Street, Boston, Mass.

Forty-nine men were present at our 20th reunion at Osterville: Aiken, Alley, Bassett, Bird, Birks, Blanchard, Bowen, H. G. Bradlee, Bryant, G. A. Campbell, J. Campbell, Capen, Conant, Damon, Dana, Douglas, Dunham, Fiske, Forbes, French, Garrison, Goodwin, Hatch, F. C. Holmes, G. A. Holmes, Hooper, Kimball, Knowles, Leeming, Mansfield, F. C. Moore, F. F. Moore, Moseley, Norton, Palmer, N. R. Pratt, Punchard, Ryder, Shattuck, Spooner, Swan, Trowbridge, Tyler, Vaillant, Walker, Wilder, Wilson, Whitney and Young. A full account of the reunion will be published in book form later, with photographs. By vote of the class, a message was sent to President Maclaurin, who has written the following acknowledgment:

I shall be obliged if, as opportunity presents itself, you will convey to the members of the class of '91 my cordial appreciation of the greetings that were sent to me on the occasion of the twentieth anniversary of the class. With such loyalty and enthusiasm behind it, the Institute may look into the future without the slightest misgivings. Please accept my heartiest good wishes for the class of '91, individually and collectively.

## HENRY HUTCHINS SYKES

Henry Hutchins Sykes died at his home at New Haven on May 18. He was the general manager of the Southern New England Telephone Co. We print the following account from the Telephone Bulletin: "Mr. Sykes had suffered for several years from a difficulty which, during the year 1908, forced him to relinquish his duties and seek recovery in complete rest and change of life. Returning from this absence from business cares, both Mr. Sykes and his associates were encouraged to believe that the trouble had been conquered, and that it would again be possible for him to assume his work and responsibilities in the company, but the improvement proved to be but temporary, and during the last few months he had been in failing health, and unable to give to his work the active direction and care which was his nature.

"Mr. Sykes was born in Suffield, Conn., and was in his fortyfourth year. He was the son of Henry M. and Adelaide M. Sykes, and is survived by both parents, and by one sister, the wife of Dr.

Frank S. Meara, of New York."



THE 20TH RE-UNION OF THE CLASS OF '91 AT OSTERVILLE, MASS.

## 1893.

Frederic Harold Fay, Sec., 60 City Hall, Boston, Mass. Frederic H. Keyes, Asst. Sec., 88 Broad Street, Boston, Mass.

The annual meeting of the class of 1893 was held on Friday, June 9, at the Tatnuck Country Club at Worcester, Mass., the following men being present: James W. Rollins, Jr., '78, vicepresident of the Alumni Association (guest); F. B. Abbott, A. F. Bemis, S. A. Breed, T. M. Brown, E. B. Carney, C. N. Cook, H. N. Dawes, F. N. Dillon, A. B. Edwards, F. H. Fay, G. B. Glidden, A. L. Kendall, F. H. Keyes, W. F. Lamb, H. Latham, F. F. Phinney, C. W. Taintor and F. J. Tomfohrde. The main party left Boston early in the afternoon in three automobiles, arriving at the Country Club in time for golf before dinner. Through the kindness and efforts of Mr. Latham, we enjoyed the privileges of the club and a most excellent dinner, after which Mr. Rollins spoke briefly on the extent of the interest shown by the general public in the recent movement to obtain increased state aid for the Institute, the success of which was due largely to the efforts of Mr. Rollins, who was chairman of the State Aid Committee. All the officers of the class were reëlected by unanimous vote for the ensuing year, George B. Glidden, president; Edward B. Carney, first vice-president; Edward D. Densmore, second vice-president; F. H. Fay, secretary and treasurer and F. H. Keyes, assistant secretary. The return trip to Boston was successfully negotiated by moonlight during the latter part of the evening. —Emery, J. A., has been made a member of the board of governors of the Technology Club of New York.—Baxter, Jesse B., has resigned his position with Walter Baker & Company, Ltd., and is now vice-president of the Blue Hill National Bank.

An informal class dinner was held at the Boston City Club on Monday evening, April 10, 1911, in connection with the celebration of the Fiftieth Anniversary of the granting of the Institute's charter. Immediately at the close of the dinner the party numbering thirty-five proceeded by taxicabs to Symphony Hall to attend the big alumni smoker. Those in attendance at the dinner were J. C. Abbot, F. B. Abbott, Barnes, I. M. Barrows, Baxter, Beattie, Bemis, Blake, Boyd, T. M. Brown, Bryant, Buchanan, E. B. Carney, Codman, W. W. Cutler, Densmore, W. E. Evans, Fay, Gilson, Hagar, Hopewell, Jameson, A. L. Kendall, Keyes, E. R. Kimball, Latham, Leeds, Lynch, C. L. Norton, E. Page, Pevear, Phinney, Rogers, Spofford, and P. H. Thomas. At Symphony Hall, Crosby, Glidden, Keith, C. F. Morse and H. A. Morss joined the party, bringing the total attendance of the class at the smoker to forty.—Wilfred A. Clapp, civil engineer, quartermaster's department, United States army, who has been stationed for several years at Fort McKinley, Portland, Harbor. Me..

in charge of engineering work during the construction of that post, has been transferred to the Pacific coast, his present address being in care of the construction quartermaster, Fort McDowell, California.—Charles H. Johnson is about to go to Cuba to take a position as civilian engineer upon the construction of the new United States naval base at Guantanamo.-J. C. Hawley, civil engineer in the quartermaster's department, United States army, has recently been transferred to Fort Moultrie, South Carolina, seven miles from the city of Charleston, where he is in charge of the dredging of a new channel across the island at that post to replace the existing government channel which is being shoaled by river deposits.—The firm of Thomas and Neall, consulting electrical engineers, of Boston and New York, has been dissolved, and Percy H. Thomas, senior member, continues in independent practice at 2 Rector St., New York City.-Maj. Frank P. Williams of the medical corps of the Massachusetts state militia, a Boston physician, was among the first detail of officers from that state to be sent to Texas to observe the mobilization of United States troops along the Mexican border.—The following changes of addresses have been reported: S. H. Brockunier, care Erie Consolidated Mines Company, Gaston, Nevada County, Cal.-Joseph W. Ellms, superintendent of Water Works, Cincinnati, Ohio.-Frederick H. Howland, Seventh and Chestnut Sts., Philadelphia, Pa.—George I. King, 200 Brady St., Butler, Pa.—Walter T. Peck, P. O. Box 769, Havana, Cuba.—Winthrop P. Tenney, care Continental Insurance Company, 46 Cedar St., New York City.

### 1894.

Prof. S. C. Prescott, Sec., Mass. Inst. of Tech., Boston, Mass.

M. S. Chace has been appointed as one of the delegates from America to the International Congress of Naval Architecture and Marine Engineering to be held under the auspices of the Institute of Naval Architecture in London July 3-8. Chace will present a paper at these Jubilee Meetings, as they are called, on "The Results of Tests on Models of Submarines," a subject to which he has given much attention, and on which he has bestowed a great deal of experimental work during the last year.-In the list of those getting their degrees in the class of 1911 appears the name of Herbert E. Hewitt, who will be remembered as a member of the class of 1894, but who was not at that time a candidate for It is to be hoped that the new affiliations of Hewett with '11 will not detract from his interest in '94, but rather that he will now feel more closely bound to the Institute and to his old associates here.-It is with very sincere regret that the secretary announces the death of Mrs. W. H. King, which occurred in New York on July 18. The cordial sympathy of the whole class will be extended to King in his loss.—The following members of the class were present at the Pops: Chace, Gardner, Nash, Piper, Prescott. An interesting feature was the appearance at the class table of Nash with his son, now twelve years old, scheduled for the class of 1921.

1895.

George A. Rockwell, Sec., 101 Tremont Street, Boston, Mass.

The class will be interested to hear that Francis E. Faxon was recently married.—The address of Arthur D. Dean has been changed to New York State Education Department, Albany, N. Y. —A class dinner was held at the Boston City Club on April 10, 1911, as an incident of the Congress of Technology. The following were present: J. L. Newell, E. L. Hurd, C. H. Parker, F. A. Bourne, H. K. Barrows, W. C. Brackett, W. D. Parker, G. F. Shepard, G. W. Priest, William T. Hall, J. E. Walworth, W. S. Williams, G. W. Hayden, C. B. Sanborn, E. L. Wengren, W. F. Stevens, E. H. Clapp, R. J. Williams, G. H. Gardiner, G. A. Cutter, A. D. Fuller, E. A. Tucker, E. J. Loring, C. F. Tillinghast, C. W. Berry, L. F. Howard and G. A. Rockwell. After the dinner the class went to the smoker at Symphony Hall.—At the banquet at Symphony Hall on April 11, 1911, in celebration of the Congress of Technology, '95 was very well represented by the following twenty-three men: J. L. Newell, J. W. Cooke, William T. Hall, G. Defren, E. J. Loring, A. D. Fuller, G. W. Hayden, E. H. Clapp, G. Clapp, C. B. Sanborn, R. J. Williams, C. H. Parker, C. F. Tillinghast, G. F. Shepard, L. F. Howard, E. L. Hurd, L. K. Rourke, W. C. Brackett, F. T. Miller, W. S. Williams, F. A. Bourne, W. D. Parker, and G. A. Rockwell.-Through the courtesy of E. L. Hurd and F. T. Miller the class had a most successful outing at the Seapuit Club, Osterville, Mass., on May 20, 21 and 22, 1911. There were plenty of automobiles available and we formed them in line and started from Milton about 9 a. m. Saturday, May 20, reaching the club in time for lunch. From then until Monday noon the time passed very quickly, some playing golf and some pool. It might be noted that some showed they could not play golf and others showed that they could not play pool. Some made use of the automobiles for driving about Cape Cod. The return to Milton was made Mon-The Seapuit Outing Club was formed. E. L. day afternoon. Hurd was elected Promoter of Social Intercourse; F. T. Miller. Censor of Places of Amusement; J. L. Newell, Computer of Pool Scores; E. H. Clapp, Teacher of English among Italian Dogs and G. A. Rockwell, Napoleon at Waterloo. These officers were unanimously elected, probably because they made themselves more prominent than any other members of the class. It is hoped that the courtesy of Mr. Hurd and Mr. Miller has not been exhausted. If not, it is quite certain that even a larger number of the members of the class will go the next time.—The annual class meeting and dinner were held at the Boston City Club on June 6, 1911. There were present at the meeting, J. L. Newell, E. L. Hurd, L. K. Rourke, W. D. Parker, J. E. Walworth, H. A. Holdrege, F. A. Hannah, W. S. Williams, E. H. Clapp, D. B. Weston, R. J. Williams, E. J. Loring, F. S. V. Sias, C. B. Sanborn, W. C. Powers, A. L. Canfield, and G. A. Rockwell. After the dinner the secretary's report and treasurer's report were read and an adjournment was made to Tech Night at the Pops.—A late number of the Electrical World contains an excellent picture of Parker H. Kemble, who has recently left the Edison Electric Illuminating Company of Brooklyn, New York, as district manager, to become general sales manager for the Toronto Electric Light Company, of Toronto, Ontario. The Electrical World says:

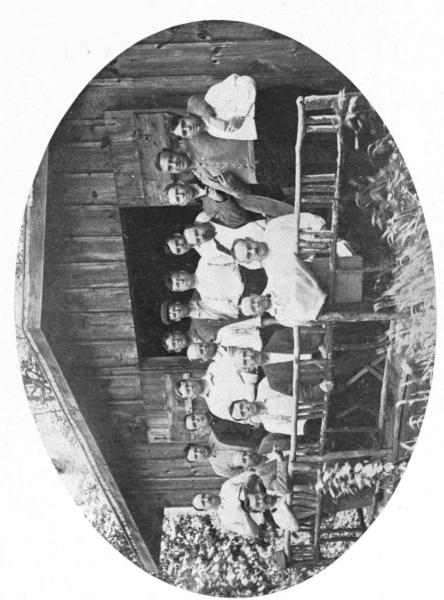
Mr. Kemble was educated in the arts and sciences at Harvard, the Technology School in Dresden, Germany, and the Massachusetts Institute of Technology. His theoretical training was supplemented by practical experience in marine and mechanical engineering in the shipyards of William Cramp & Sons, Philadelphia. Later he joined the engineering staff of the Boston Elevated Railroad Company, where he was employed in the design of power stations and cars. When the Windsor Locks Electric Lighting Company, the Enfield Electric Light & Power Company and the Enfield Gas Company were consolidated into the Northern Connecticut Light & Power Company of Windsor Locks, Conn., Mr. Kemble was engaged to rebuild and operate the combined system. An account of this interesting work appeared in our issue of May 5, 1910. Prior to joining the staff of the Brooklyn Edison Company Mr. Kemble was employed by the National Electric Light Association as acting executive secretary in the preparation and handling of the Atlantic City convention. His wide experience and training made him a valuable asset of the Edison company and fitted him admirably for his new post. Mr. Kemble is a member of the American Society of Mechanical Engineers and the Society of Naval Architects and Marine Engineers. He is also an associate member of the American Society of Naval Engineers.

#### 1896.

PROF. CHARLES E. LOCKE, Sec., Mass. Inst. of Tech., Boston, Mass.

During a recent reorganization of the Bell Telephone interests in the middle West, L. N. Whitney, was advanced to the position of general superintendent with headquarters at Indianapolis. His principal work consists of reorganizing and rearranging the various smaller companies of the middle West, so that they may fit with the general system of the Bell Company.—J. W. Stickney was recently advanced to the position of commercial superintendent, having charge of the active business management of the Bell interests in the same territory.—J. L. Wayne at the same time was given the position as traffic superintendent, having charge of the operation of the Bell plant in the same territory.

—The crowd turned out well at the smoker and banquet April 10 and 11 in connection with the Congress or Technology. The



CLASS OF '96 CFLEBRATING ITS 15TH ANNIVERSARY AT LITTLE SQUAM LAKE, N.H.

following men were present at either one or both events: J. A. Rockwell, E. C. Hultman, H. W. Hayward, G. F. Ashton, J. G. Callan, E. R. Brackett, J. H. Haste, C. E. Locke, H. C. Lythgoe, H. S. Baldwin, M. E. Pierce, H. Cummings, Jr., C. H. Young, D. W. Beaman, A. D. Maclachlan, P. W. Litchfield, F. H. Smith, H. K. Sears, S. S. Bell, H. D. Jackson, E. H. Robinson, C. Batchelder, M. L. Fuller, H. G. Grush, W. H. James, N. H. Sanderson, F. C. Hersey, Jr., C. C. Howland, Joe Hewett, C. W. Tucker, C. B. Tower, J. E. Lonngren, J. E. Woodwell, T. W. Bailey, G. E. Stratton. Some of these men such as Cummings, Ashton, Sears, Howland, and Bailey have appeared very, very rarely at any class gatherings, and it was a pleasure to see them again. From Johnstown, Pa., came Lonngren for the first sight his classmates have had of him since 1896. Fifteen years have only served to give him a little more avoirdupois. Haste came from Rochester, N. Y., and sang in the same fine form as on the old glee club. Litchfield came on from Akron, Ohio, and Young and Woodwell from New York. "Con" acted as usual. Previous to the smoker on April 10, eighteen of the fellows gathered at Charlie Wirth's restaurant on Essex street, for an informal supper. Twenty-eight '96 men were counted at the smoker and sixteen at the banquet.—Hultman sailed from New York on June 17 with the Boston Chamber of Commerce crowd on their European tour. He felt that he deserved a rest after the passage of the Institute bill by the Massachusetts legislature. As an active member of the Technology committee his previous experience, both as representative and senator, was of great value in working the bill through its various stages.—Ralph C. Henry announces that he has opened an office for the practice of architecture at 8 Beacon street, Boston, Mass., in association with Clarence P. Hoyt.—At the Minnesota convention of the International Association for the prevention of smoke, Joe Harrington read a paper on the Harrington Stoker, dealing especially with its application to small units.—E. H. Laws has recently been advanced to the superintendency of the Ohio and Colorado smelter at Salida, Col.—At the Pop concert in Symphony Hall on June 6 there were eleven '96 men present: F. H. Smith, G. P. Hatch, E. R. Brackett, C. B. Tower, C. W. Hapgood, J. W. Clary, A. P. Underhill, C. E. Locke, W. H. Clifford, Jr., E. H. Robinson, S. S. Clary had been ordered up from Washington on a short job and took advantage of the opportunity to see his classmates for the first time since 1896.—Captain Clifford was another man to make his début. Just now he is on the U. S. S. Missouri stationed at the Boston Navy Yard. He has recently sent in his resignation, to take effect August 24. He is a brother of Major Clifford of Portland, Me., and resigns to enter business. He has been in the Marine Corps since 1899.—The Iron Age of March 23 contains a description of the new wire plant of the

Cambria Steel Company at Johnstown, Pa. The article closes as follows:

Mr. John W. Lonngren, for many years superintendent of the wire department of the Colorado Fuel & Iron Company at Pueblo, has been appointed superintendent of this plant and it has been erected largely under his supervision.

## REUNION OF THE CLASS OF '96 AT SHERWOOD FOREST, SQUAM LAKE, N. H.

Foreword. It is with much regret (and other feelings) that we are forced to announce the base desertion and traitorous action of the officially appointed reunion historian who capitulated to the enemy even before he started for the seat of strife. This will explain the mediocrity of the story, except that part describing the ball game. This has been contributed by Doctor Rockwell and from a medical and literary point of view will be found to be a homeopathic gem.

Previous classes had told us of the beautiful location of Sherwood Forest, of its calm, restful atmosphere, and finally of its ideal host. Dr. F. E. Schubmehl, with his assiduous corps of assistants, but we found that the half had not been told. The suggestion is made to the liberal friends of M. I. T. that coincidentally with the securing of a new site we also secure from Doctor Schubmehl the perpetual use of his camp for official class reunion grounds. The advance guard consisting of Lythgoe, Rockwell and Locke left North Station, Boston, at 8.15 a. m., Thursday, June 15, arriving in Lowell at 9.00 a.m. There we were met by C. W. Tucker with his Stanley milk wagon and the trip commenced over the road. Call was made on Fred Coburn who was found to be in the bald headed class. Family cares prevented him from joining the crowd. In spite of hot brake shoes the machine was able to reach Manchester in time for lunch through the strenuous work of Rockwell, who gave it frequent doses of aqua in allopathic quantities. In Manchester Thompson took us in hand and we passed a pleasant hour at the famous Derryfield Club. Rested and refreshed we continued on through Concord, Franklin, Laconia and the Weirs, where the last stand was made for water. Camp was made at 6.30, where we found awaiting us Joe Driscoll, Chenery, Merryweather, Wise and Sanderson, who had come up by train. Tucker was much chagrined to find that the Boston & Maine had won out on his Stanley but with characteristic vigor he immediately shifted the blame to Rockwell for his failure to get out and push when we were climbing hills. The dinner call put an end to the discussion and soon peace was restored and all joined in a united attack on the bountiful supply of steak and onions which the chef had prepared. The evening was spent in the Recreation Hall before the six-foot fireplace with its blazing

fire and a game of cards was indulged in by the experts. All were in bed early. Friday morning we were up almost with the sun for an early dip in the lake. After breakfast Fuller appeared and during the day the following arrivals were recorded: Hurd, Grush, Melluish, F. H. Smith, Sumner, Merrill, Hersey, Hatch and Partridge. Sanderson was forced to leave at night in order to be in Boston to celebrate the seventeenth of June. Nothing strenuous was allowed on this day. Most of the fellows indulged in bowling and cards were also employed to while away the time. A continuous fight was made to dispose of the grub provided by our host but the day ended with the score heavily in favor of Schubmehl. Everyone succeeded in getting to bed before it was time to get up, but Joe Driscoll had a narrow escape. Partridge started to take a picture today, but it was after lunch before he started so that darkness made him suspend operations before he finished. Saturday Rockwell and Hurd volunteered to relieve the situation regarding the scarcity of food supply and started off on a fishing trip loaded down with worms, spoons, shiners, and other forms of bait. This was the day of the great bowling match between the teams captained by "Weber" Tilley and "Fields" Merrill. The latter was leading when "Weber" rolled himself down the alley and scored a strike. "Fields" claimed a foul which was not allowed. It was some time before the captains were disassociated into their component parts, the umpire rescued, and fines apportioned and collected. To settle the team rivalry a pool game was started, which, after an hour, was called on account of lunch, the score then standing eight balls to seven in favor of the winning side. Much regret was expressed that the reunion could not be prolonged another week so that the game might be fininshed. The ball game ensued in the afternoon.

# REPORT OF BASEBALL GAME, SQUAM LAKE, HOLDERNESS, N. H. "Sherwood Forest"

#### TEAM A

TEAM B

Partridge, 3rd
Melluish (Cap.), c. f.
Hatch, 2nd.
Grush, r. f.
Merryweather, p.
Hurd, 1st.
Rockwell, c.
Maclachlan, l. f.

Smith, 1st.
Stevens, 3rd.
Sumner, 2nd.
Wise, c. and p.
Driscoll, l. f.
Fuller, c. f.
Hersey (Cap.), p.

Team A. 0 3 1 3 5 5—17 Team B. 0 4 3 0 1 4—12

Scorer, Merrell. Umpire, Tilley. The fans, Chenery.

It was a great game that took place in the tall grass on the shores of little Squam under a summer's sun. The grand stand rocked with the demonstrations from the fan. Before the game was well under way the appearance of a female, on the outskirts of the forest, created no little concern and Captain Hersey remarked that under the circumstances his costume was too abbre-As the lady approached there was a grand scramble to do her honor, and when the clouds had cleared away and proper surgical measures had been completed, none other than Brother Hurd was the base deceiver. This colored lady on first covered herself with glory, confusion and at times embarrassment when interfered with by base runners. Several died at first in spite of adequate medical mistreatment, but "Doctor Parkhurst" was on hand to "cover up" all professional mistakes. Joe Driscoll was several times lost in left field looking for Maclachlan's long flies, but he will learn the rules of the game in time. The battery work was stellar and team-play was (n)ever in evidence, but considering the rotten decisions of both the umpire and scorer it was quite a ladylike party. The keg failed to arrive on 3d and considering this lack of foresight, the agility shown in getting to the 3rd sack was unexpected. Those who missed the keg at 3rd found it at home ("Sherwood Forest"), and it is whispered that several went "home" too many times. Scorer Merrell was all but annihilated for failing to know whether the side at the bat or in the field was making the runs, but after the 3rd inning he began to take some of his "milk-powder" and regained consciousness. John Tilley showed little ability as a peacemaker but made up for light brain capacity by modest (?) measurements about the waist. Team A's success was in no little way due to the energy and scientific coaching of Jim Melluish and the work of "Baby" Smith at first, "Butterfinger" Sumner at second, "The New York Delegation," Stevens at third, "official photographer," Grush in right and Hatch at second made the afternoon's sport one to be long remembered. It wasn't darkness that called the game; but because official weight showed a great falling off in "Skinny" Fuller, Partridge having to take several "moving pictures," otherwise playing fair, together with a general demoralization because of the thirst with no succor.

Tucker got out his milk wagon this morning and started for home accompanied by Lythgoe. They felt that they must go in order to be back in Boston by Monday morning. Maclachlan appeared this morning for breakfast and H. C. Stevens at lunch. Thompson arrived in his auto in time for the ball game. The formal class dinner was held informally this evening. Fish was to have been the main course, but the fishermen had returned empty handed, and so we had a pick-up dinner which nearly overflowed the tables. There were no set speeches but everybody made a noise except Merryweather and Partridge. Several song hits were

rendered by the quartette assisted by the full company. These were well received except for the second verses. By special request Partridge gave his famous illustrated talk on "Personal Experiences in Alaskan Prisons" and when he had finished he informed us it was one of the most appreciative audiences that he had ever addressed. Ben Hurd pronounced it a dream. Joe Driscoll in his eagerness to drink in every word nearly climbed over the stage while Thompson was so struck by the beauties of the Pribloff Islands and the attractiveness of the seals that he left the crowd at that point. Rockwell desired that the lecture be repeated for his benefit explaining that he had been overwhelmed by the flood of ideas regarding Alaska's natural beauties, climate, history and commercial possibilities. Singing of Tech songs filled in the rest of the evening with Melluish at the piano. special request we were lulled to sleep by an extended phonograph concert while "Nurse" Smith made frequent rounds serving ice water. Sunday was a day of quiet. In the forenoon a grand triumphal tour of Big Squam Lake was made by boat. In the afternoon a big bunch departed to catch the Boston train at Ashland leaving behind only Rockwell, Smith, Melluish, Driscoll, Partridge and Locke. After supper our host exhibited his skill in legerdemain and a delightful evening of conversation and reminiscences was had. At sunset the '96 flag and the Stars and Stripes were officially lowered after having been flying continuously since Friday morning. Monday saw us up at 4.00 a. m., to catch the early train for Boston. At Concord we found H. D. Jackson who had yielded to feminine charms and had not reached the camp.

## NOTES

It was a unanimous vote that we would all be present in 1916. -The weather was ideal throughout. So was everything else. -"Every Little Movement" by Partridge will never be forgotten. -As end men Merryweather and Partridge were par excellence.— The practical demonstration by Tucker of his cream separator was worthy of an Edison.—The chapter by Hurd and Rockwel on "Fish We Didn't Catch" has been expurgated from the official records.—The snoring contest on Friday evening was a great success; likewise the quieting effect of the Partridge tube .-The Tannhauser overture in the dormitory Saturday night was one of the most vivid and realistic productions of the age. -Official weights were: Merrill, 250; Fuller, 242; Tilley, 241 7-8; Locke, 217; Smith, 210; Lythgoe, 206; Stevens, 198; Rockwell, 193½; Chenery, 192; Merryweather, 190; Maclachlan, 189; Partridge, 187; Hurd, 180; Tucker, 174; Sumner, 1711/2; Wise, 167: Driscoll, 165; Hatch, 165; Grush, 146; Hersey, 145; Melluish, 1371/2; Sanderson, 117½; Thompson, barred on account of having no appendix.—The fireworks display on Saturday night was a grand success and the fire balloons went up without a hitch, all due to the expert supervision of Rockwell.—Much pleasure was had in reading the letters from fellows who did not come. Charlie Hyde and Willis sent a wire from San Francisco.—Chenery and Stevens the only bachelors in the bunch, were carefully looked after and put to bed early.—No regular court martials were held, all minor offences being attended to by the officer of the day.

John Arthur Collins, Sec., 67 Thorndyke Street, Lawrence, Mass.

As announced in the April number of the Review, the second class reunion of the season was held at the Colonial Club, Cambridge, on March 28. Dinner was served at 6.30 p. m., following which the members present spent the evening in the bowling allevs, which had been reserved for their exclusive use. A most enjoyable evening was spent.-Fifteen fellows were present on the evening of the smoker, April 10, about fifteen of the class met at the Copley Square Hotel for an informal dinner preceding the events at Symphony Hall. Wadleigh came on from St. Louis particularly for the Technology Congress. That is showing the Technology spirit in the right manner. Get busy, some of you fellows, who live within fifty miles of Boston, and do likewise. Later in the evening at the smoker, although no effort was made to keep together as a class, still off and on, the gang would gravitate toward a common center. Among those present were Bradlee. Hopkins, Worcester, Lamb, Bliss, Eames, Hammond, Carty, Jesse Hubbard, Breed, Humphreys.—The last gathering of the season occurred on Saturday, May 20, at the Tedesco Club, Swampscott. Through the courtesy of Bradlee the fellows were given the privileges of the club for over the week end. The attendance was disappointing, only five of the faithful showing up, viz., Hopkins, Breed, Worcester, Harry Sawtelle and Bradlee. The secretary at the last moment was unable to go. The fellows played golf or otherwise amused themselves, returning to Boston on Sunday afternoon.—The secretary received a letter from Potter, who until very recently has been at Aguascalientes, Mexico, with the American Smelting and Refining Company. He is still with this company as chairman of the southern department of the executive committee. He sailed for Europe on June 1, on a business trip. -Alden, who for a time has been with the New York and New Jersey Telephone Company at 15 Dey Street, New York City, has gotten "back to where life is worth living" as he puts it,-in other words, Boston. His home address is 21 Church Street Newton.—Charles B. Paine of Hallowell, Me., was married on April 26, to Miss Edith Partridge of Augusta, Me.—The photograph of Kendall Fairbanks which appeared in the April REVIEW.

was taken only the day before he went to the hospital to prepare for the operation. The good health of the man, aside from his peculiar affliction, made the sad termination the more pathetic.

1898. Ernest F. Russ, Sec., 70 High Street, Boston, Mass.

There have been two informal dinners of the class this spring, both of which were at the Boston City Club. The first dinner was on the occasion of the large reunion of all the classes held April 10, and after which, every one went to the Pop concert at Symphony During these festivities commemorating the granting of the charter there were about forty men in this class which attended the different functions. Danforth who came from Washington was probably the one who traveled the greatest distance to be The second dinner was the annual one preceding the Pop concert at Symphony Hall on the evening of June 6. At the dinner and the hall there were probably twenty-five men. It was decided at this last dinner that there should be two informal gatherings next year, besides the regular one in June, and it is sincerely hoped that each of these may have a large attendance. Notices will be sent out announcing the dates. At the time of the April 10 dinner, return postal cards were sent to the different men in the class, and the notes received therefrom were of much interest. We will give a few of them now, and another issue of the Review will contain the balance. Lacy, Robert, is working on contracts for the Barge Canal and New York Central Railroad and states that the climate at that place is very bad for contract work, giving them only seven good working months in the year.—Guy, James R., has recently been elected principal of the industrial school for colored persons in Charleston, S. C. He would like very much to hear from any member of the class who is interested in this kind of education.—Bleecker, John S., is at Columbus, Ga., and still enthusiastic about the class of 1898.—Tompkins, E. A., has the exclusive sale of Columbia graphophones and records in Pittsfield and vicinity, and also has the largest stock of independent photographic supplies in Berkshire county.—Goldsmith, Clarence. is with the National Board of Fire Underwriters with headquarters in New York City. For the past year, however, he has traveled in the West inspecting the water works of San Francisco, Los Angeles, Seattle, Colorado Springs, Denver, etc. At present he is in Philadelphia.—Barker, Harrington, was recently elected vice-commodore of the Corinthian Yacht Club of Washington, D. C.—Goodrich, Miss Annie L., is now teacher in the West School, Malden, Mass.—Churchill, Durand, last year made a tour of investigation through Australia, Tasmania, Fiji Islands, Hawaiian Islands and Canada. He is consulting engineer at Port Lorna, Cal.—Dickson, J. B., writes that he is not dead yet.—

Wesson, P. B., has been a member of the Lowell City Charter Revision Committee the past winter and states that that body proposed a new charter which is now before the State legislature. Any politicians in the class will kindly take notice and give it a lift. —Chapin, E. S., had a daughter, Margaret Louise Chapin, born last June, but which we believe has not been noted in these columns before.—Jones, Dr. Harold W., has been for the past two years in Washington. His work is mostly surgical. His position is captain medical corps, U. S. A. He is principally at the Army General Hospital in that city.—Monteith, Arthur D., is still pursuing the same old profession behind the transit. He is at Vancouver, Wash.—Kendall, Robert E., can now be reached at Parlin, N. J., care of International Smokeless Powder & Chemical Company. He is at present holding the position of chief chemist at this plant, and states that the concern is controlled by E. I. duPont de Nemours Powder Company.—Meyers, David J., is an architect and has been in Seattle six years. He was associated with Mr. J. Graham under the firm name of Graham & Mevers but a while ago dissolved partnership and at present is president of the Washington State Chapter A. I. A.—Brown, Dickson Q., is the second vice-president of Tide Water Oil Company, 11 Broadway, N. Y. We quote direct from him. He writes: "Am well, happy, making money, going to Europe this summer, glad I went to Tech, was born single and am still unmarried. Whoop La!"-Koch, C. S., was married Jan, 11, 1911, to Miss Jane Nicholson of Wilkinsburg, Pa.—Byam, L. H., states he has a candidate for the class of 1933 in his family, William Melhuish Byam, born Feb. 15, 1911.

Cards have been received announcing the marriage on June 17, of Robert S. DeGolyer and Miss Eleanor V. Harris, a sister of President Harris of the Northwestern University. DeGolyer is associated with the firm of Marshall & Fox, architects of Evanston, Ill.

# 1899.

# H. J. SKINNER, Sec., 93 Broad Street, Boston, Mass.

The class was well represented at the Congress of Technology, about fifteen men being present at the class dinner and smoker. Papers were read by Hinckley on "The Scientific Thought as Applied to Railroad Problems" and by Skinner on "The Debt of the Manufacturer to the Chemist."—Rickards has been appointed associate professor of Municipal and Sanitary Dairying in the College of Agriculture, University of Illinois. Rickards also announces that he is the father of a husky boy, Leighton Ransom Rickards, born June 8, 1911.—Brainard Taylor is in Galveston, Tex., acting as commissary of Second Provisional Regiment, with the rank of captain.—Hapgood is connected with the water department of the city of Jamestown, N. Y.—Milliken is located in Pasadena, Cal.

D. C. Churchill has returned, with his wife and two sons, to Ahmednagar, in India, where he has charge of the mission industrial work. We understand that although Churchill receives only the regulation missionary's salary, he was offered and has refused a \$6,000-a-year position from the British government. Churchill is also well known as the inventor of a wonderful hand loom, which is used by the natives in weaving cotton, and which bears his name. In the early part of May he was among the speakers at a luncheon given by the Twentieth Century Club, Boston, and described interestingly the progress and the effect of industrial education in India.

1900.

Ingersoll Bowditch.

George C. Gibbs.

N. J. Neall, Sec., 12 Pearl Street, Boston, Mass.

The class of 1900 was well represented at the recent annual convention of the National Electric Light Association, held in New York during the week of June 1. Collier, who is chairman of a committee, read a paper giving the report of the committee on ornamental street lighting.—Penard attended the convention as a representative of the Boston Edison Company; Graff, representing the Simplex Electric Company; and Neall as his own representative.—On Friday evening, June 2, Neall met MacPherson on his way to assist in the rehearsal for Grant's wedding, which was to occur the next day. MacPherson was to be Grant's best man, and Grant was giving a bachelor's dinner at the Hotel Astor.— Only three 1900 men turned out for the Pop concert: Walworth, Reardon and Hapgood. Neall fully expected to be present, but was unexpectedly called out of town at the last minute on business matters.-Vogel was recently in Boston and gave some of his friends the benefit of a call. He is still at Buffalo and enjoys his work with the steel company.—Gibbs was ordained a deacon of the Episcopal Church on Tuesday, June 6, and was given the honor of assisting in the service by reading the lesson. He received his degree on Wednesday, the seventh, at Cambridge. Gibbs expects to spend the summer vacation in the east and will then leave for Oklahoma, where he will take up his first duties.

Lost. Somewhere between the State Department of Health, Harrisburg, Pa., and the College of the City of New York, New York City, one Frederick W. Witherell, better known as "Doctor," of what, nobody knows. No reward offered. Kindly inform the secretary of his address as mail addressed to him is being returned.—The writer of the class news in this issue sent out about thirty requests for items of interest from the fellows and he wants to thank the ones who responded, and takes this method of doing it. There were fifteen replies received.—Thomas D. Perry writes:

Technology is represented in Grand Rapids in only a limited way. L. L. Cavyan and the writer are the only two 1900 representatives and there are two 1901 men, Higgins and Campau. Campau, of the firm of Robinson & Campau, was the architect for the new Central High School building here, which has just been completed, an illustration of which I send you under another cover, so that really with Campau's hand on the artistic lever and mine on the business lever we have been able to give the city of Grand Rapids the worth of its money in this high school building. I was in Boston the latter part of March and tried to find time to look up more of the class than I did. I saw Walworth, Ziegler and L. S. Smith, and had a chance to see how the old Institute looks.

—Perry is business manager (whatever that is) of the Board of Education of Grand Rapids, Mich., and must be quite a politician by this time for he has held his "job" for a number of years.—And here's a line from Jouett. He doesn't seem to think that getting married is much news but it is. Anyway we all extend our best wishes.

I haven't seen anyone from the class in months and therefore know of no class news. As for myself I might say that I am to be married on June 5 to Miss Katharine Boyd of New York.

—Merrill, out in Easton, Pa., at Lafayette College, where he is "teaching the young idea how to shoot" (not the literal interpretation of the word "shoot" even if he was one of the officers in our famous battalion), comes back at us with a new one in shape of a class yell. We advise each class member to try it and let us have his opinion. There is no question about the need of a good class yell something like the "We are happy."

If the Pop concert could only happen a week later I would positively be there. As there has been talk of getting up a new yell [a proposition which should be enthusiastically endorsed] and suggestions invited, I humbly, and almost apologetically, submit the following, thinking it might be given a try-out at the class dinner:

Double O
Double O
Double O
O-O, O-O, O-O, O\*
M. I. T.
Double O.

\*To be yelled with hand vibrating over mouth, holding forefinger against lip and thumb against cheek.

But please don't print it unless it is approved by the fellows in place of "Boomrah-ree." I move that publication of the Class Book be deferred until 1920.

—W. C. Dean, Course VI, has recently accepted the appointment to the position of expert electrical aid, Bureau of Construction and Repair, Navy Department, Washington, D. C. During the hot weather he will maintain his residence at Norfolk, Va., where his family are comfortably installed at "Cottage Pines" on Lafayette River.—We were glad to get the following from S. P. Brown. And from other sources comes the report that he's certainly "making good."

I have not been doing very much except trying to keep from freezing to death in the winter and roasting to death in summer, in an extremely "bum" office that

I built myself. When I was graduated from the Institute, I went down south in partnership with W. R. Collier, also of the class of 1900, and practised consulting engineering for three years; then I came north, did a few odd jobs in consulting work and went with the New York, New Haven & Hartford Railroad Company for a year. In 1905, I went with the United Engineering & Contracting Company of New York, first as resident engineer on the Port Morris Depression and Tunnel Work under St. Mary's Park of the New York Central Railway; later as their (U. E. & C. Co.) representative in consultation with the city of San Juan, Porto Rico, on public utilities and later still as principal assistant engineer for them in building the crosstown tunnels of the Pennsylvania railroad under Manhattan Island. In that work I had general charge of temporary structures and concrete construction, and later, of all work west of Fifth Avenue. When that was completed, I went abroad for some time to investigate European tunnel practice and made preliminary designs for the sewage pumping station in Havana for the Cuban Engineering and Contracting Company, and again in 1909, made another trip abroad to look up some more work for the United Engineering and Contracting Company.

In December, 1909, I went with the Tide-Water Building Company and Thomas B. Bryson as chief engineer to build section 11-A-3 of the Fourth Avenue Rapid Transit subway in the borough of Brooklyn, city of New York, where I still am. Finally, as an item of special interest, I expect to go to see Christie McDonald in the Spring Maid, tomorrow night with W. R. Collier of Atlanta, who is up here for the meeting of the Electric Light Association. I hope this itinerary will be of

inestimable value to you.

—This letter from C. E. Smith, dated at St. Louis is certainly a "dandy" and he can rest assured that now we have "located" him he will be a regular contributor to these pages, and no more will be rest undisturbed.

Your letter of May 22 just received. For about eleven years I have flattered myself that I had successfully eluded the grasp of those searching for class news, as it did not appear that any of my doings during that period were worthy of publication. It appears now, however, that I am discovered and therefore found. This discovery is the direct consequence of my having remained in the same place so long, that is, for about four years, my movements during the previous seven years having been of sufficient frequency to prevent my discovery. I entered the Maintenance of Way Department of the Missouri Pacific Railway, August 1, 1907, and after about six months of general maintenance and improvement work in Arkansas and Louisiana, was called to St. Louis to assist in handling bridge matters, formerly handled by the Engineer Bridges and Buildings, whose office, on account of financial depression and other reasons, was abolished about that time. In September, 1909, I was made bridge engineer and since that time have looked after investigations, designs and construction of a large variety of work, including sub and superstructure of railroad bridges and any number of grade crossing eliminations. In this work I have been, and am now, ably assisted by the following Tech men: S. L. Wonson, 1901; C. P. Howes, 1904; R. D. Kelley, 1906; all of whom, including myself, are very much interested in the recently organized St. Louis Society of the M. I. T. No doubt you, as well as many others, feel that you need no introduction to the Missouri Pacific Railroad, in view of the amount of advertising this road has recently had. The road is about 7,200 miles in length, of which the bridges for about 5,000 miles are in such condition that they will carry any engine in the United States at full speed. Practically all of the lines are ballasted, several thousand miles are laid with 85 pounds rail and several hundred miles with 100 pounds rail. The system is located in the fertile and promising Mississippi Valley and extends from the southern Illinois coal fields on the east to Pueblo, Col., on the west and from Omaha, Neb., on the north to Lake Charles, La., near the Gulf of Mexico on the south, operating in the eleven states of Illinois, Kentucky, Tennessee, Mississippi, Missouri, Arkansas, Louisiana, Nebraska, Kansas, Oklahoma and Colorado.

The word "promising" in the preceding sentence is used advisedly.

agreed that there is promise of prosperity and success in this great southwest, but the railroads in this section are not suffering from it. The volume of traffic, throughout this more or less sparsely settled district, is not so great as throughout the east and north, the result being lower gross earnings per mile of road. In addition, rate and other legislation by the Interstate Commerce Commission and general adverse legislation by city, county and state boards, all of which result in increased expenditures and decreased gross earnings, have affected the railroads in this section probably more than in any other, as is evidenced by the fact that other roads in this section, comprising many thousands of miles of lines in addition to ours, have not paid dividends for several years and are having a hard time to make the income equal to or slightly greater than the fixed charges. These conditions have brought about the necessity for a high degree of scientific management. So much money must be spent for improvements ordered by civic boards that result in an increase in the annual expenditures with no corresponding increase in income, that in order to keep the balance on the right side of the ledger it becomes necessary to practice all possible economies and to carefully analyze all proposed improvements, to make certain that the result will be a net increase in earnings future field for engineers looks more promising in view of the recent selection of Mr. B. F. Bush, an engineer, as president of this system, and his appointment of Mr. E. J. Pearson, an engineer, as vice-president in charge of operation. With this full and free confession I hope that I may be entitled to eleven years more of security.

## Keay writes from Montreal:

Failure to send in any news of myself during the last two years has been due to that becoming modesty which characterizes all Tech men, rather than from a lack of material. The close of this session completes my fifth year as a professor in the department of railways, in McGill University, and my third as head of the railway department. The task of developing the transportation course in the faculty of applied science at this institution has called for no end of work due largely to the fact that we were among the first to attempt such a course. The larger Canadian railways have very generously backed the enterprise, and I am glad to say that it is now running smoothly and successfully. The railway companies are giving our transportation students practical training during the vacations, finally taking them over after graduation, and best of all, the men are making good. The summer of 1909 I spent in England and on the Continent, studying European railway methods. Contrary to the general impression, I believe that we may profit a lot from European experience, particularly in the matter of safety in train operation. During a little side trip in Switzerland, I came across a very ardent admirer of Tech in the person of Mr. William Denny, of the well known firm of Denny Brothers, ship builders on the Clyde. His son is a graduate in '08, and he says there is nowhere a school in the class with Tech. Last summer I spent a considerable part of the time on a test of one of the Canadian Pacific Railroad Mallet compound locomotives, running between Field and Revelstoke, through one of the finest sections of the Canadian Rockies. Having missed a number of Tech and class reunions has been a matter of regret to me, but I'm always with the fellows in spirit, at least. There are a number of Tech men here in Montreal, and I am going to undertake to get a Tech club under way. The time is ripe.

## Here's success to the new Tech Club of Montreal: Here is a letter from Keith:

Barker, Course VI, 1900, is here at Los Angeles with the Board of Public Utilities and I have seen him several times. It was my fortune to be here during the recent convention of the Institute of Electrical Engineers and the local members certainly did things up brown and gave the visiting members a bang-up good time. Mr. Miller, one of the members of the firm I am with, and I, have been making an appraisal

of the telephone plant of the Pacific Telephone and Telegraph Company. We are practically finished now and expect to return to Chicago in the course of a few weeks.

If the natives of California think that state is next to heaven what must the natives of Texas think of that state if this letter from Holbrook is correct. Holbrook, come back where the east wind blows.

You can't expect a man to know much or learn anything new when the thermometer on his desk stands at 106 every day as it has done here lately. Have been here five years now and every one is hotter than the last. If you want your friends to get a guaranteed course of training for the hereafter just send them to Texas. Degree of "T.T.D." (Doctor of Torrid Temperature) awarded on request, on payment of tuition fee (one ton artificial ice) in advance. A few Tech men in Fort Worth and Dallas formed a preliminary Alumni Club last winter, but the removal of the moving spirit elsewhere caused the matter to drop. If the rest of us survive the "heated term" I am going to try it again later on and see if I can't get transferred somewhere.

Collier from Atlanta, Ga., sends us the following. We hope to see him up north at the five-year reunion, when the new site is dedicated.

While in New York on my recent trip, I met S. P. Brown, Course II, who is now chief engineer of a section of the Brooklyn subway which is being built. Brown is now living in Lawrence, L. I., and has a youngster, Stephen Luce Brown, who is about one and a half years old. Harry Leslie Walker, Course IV, is doing architectural work, under the firm name of King & Walker. They have offices in Atlanta and are doing a great amount of fine work. Billy Hough is at the head of William B. Hough Company, Chicago, Ill., and was in Atlanta several weeks ago. He seems to be prospering and is certainly getting fat. As for myself, I am still contract agent for the Georgia Railway and Electric Company, and am kept so busy that nothing out of the ordinary ever happens to me.

Maxfield tells us that he is just starting to pump out a big coffer dam around a lock at Buffalo and expects to pump 11000 gallons per minute all summer while they are placing the gates. The lock is 700'x45'; the gates, of which there are five, weigh 150,000 pounds each and are operated by electricity.—Bill Stone writes that he is at the same location in Newburg, on the construction of the concrete aqueduct and a steel pipe siphon of the Catskill aqueduct.—Redman is working for the civil engineer at the Naval Training Station, Newport, R. I.—Southworth down in Washington writes Wastcoat the following. He ran into him in—?— in the capitol city a number of years ago.

I have been here at the Bureau of Yards and Docks now, four years and have had a steady diet of hospital planning and specification writing that has brought me into touch with some of the best hospital work in the country. The Bureau is designing the Navy hospitals for the Bureau of Medicine and Surgery and has turned out work to the amount of several millions of dollars. The hospitals are located all over the country from Pearl Harbor, Hawaii, to Portsmouth, N. H. One is being built now at Chelsea which will be up-to-date in every respect. In connection with the

hospitals there are usually quarters to be designed for the medical officers, for the hospital corps, and for the nurses. The work is varied and interesting and does not get tiresome or monotonous.

—Bobbie Howe, the same old boy as ever sends us some pictures which we should like to publish. The first one shows Neall and Howe playing Indian behind a sand hill at Howe's home at Gloucester and the second shows Neall fast asleep on the doorstep, entirely played out, the strenuous life too much for him.

Your dun arrived, and can help but little, as I lead a most lady-like existence. Took Neall down to Gloucester for a week-end party, and made him wheel rubbish and other stunts, while digging in the garden myself. Enclose a couple of pictures and films, which you can use or not, but return at your convenience. The tramp is Neall. Wish I could help you, but I am pretty quiet, bad business is picking up now a bit. Won a golf cup, by good luck, so amuse myself out doors.

Haugh writes us as follows from Chicago:

Inasmuch as I am too busy to be creating any history at the moment of interest to yourself or anyone else, I am enclosing my card, which I hope will be satisfactory.

This letter from Davis leads us all to believe that some day from a town in Indiana will come forth a man famous either as a poet or as an author of blank verse, or possibly a humorist. Who knows?

I thought Taunton was a big place, but where's your street and number? Post-master a friend of yours? This gentle way of opening my letter to you was adopted purposely to break gently to you the fact that I've no news whatever for your six pages of the Review. Out in this neck of the woods, we have to keep hustling in order to stay where we were in the beginning; and I'm not up to the pitch of the superstrenuous which makes one go ahead. Therefore I've done nothing—seen nothing—heard nothing—know nothing—am nothing. So when you come down to the D's in the alphabet of the class, drop a tear and breathe a sigh and reverently pass on.

## HARRISON EVERETT ASHLEY

Prof. A. V. Bleininger contributes the following to the memory of Harrison Everett Ashley, from *Rock Products*, February 22, 1911:

The American clay working fraternity has suffered a great loss in the death of Harrison Everett Ashley which occurred February 4, at Pittsburg, due to meningitis, following two operations for mastoid abscess. He was taken away in the midst of his labors from the work which he loved so well. His death was a great shock to his many personal friends as well as to all clay workers concerned in the

welfare of the industry and its higher development.

Harrison Everett Ashley was born at New Bedford, Mass., August 2, 1876, of good Puritan ancestry, the son of A. Davis and Caroline Morse Ashley. As a child he was studious and always eager to get at the bottom of things. He was educated in the public and high schools of New Bedford and later attended the Massachusetts Institute of Technology, taking the course in chemical engineering. At the Institute he was a close student and exceedingly thorough in all he did. He was graduated in 1900 with the degree of S. B. in chemical engineering. Mr. Ashley, during his college course, had specialized in metallurgy and consequently took up the tech-

nology of foundry metal and steel after leaving the Institute. The held several positions in steel plants and foundries, but meanwhile became exceedingly interested in silicates, with special reference to slags and clays. Upon corresponding with Professor Orton, he was advised to secure a practical position. This he did, and entered the employ of the Homer Laughlin China Company, at East Liverpool, Ohio. Realizing the advisability of securing special training in this line, he then took a special course in ceramics at the Ohio State University under Professor Orton. During his stay at the university he was honored by the election to Sigma Xi, an honorary scientific fraternity. After completing this work Mr. Ashley returned to his position at East Liverpool, where he was placed in charge of the kiln work, and later of all the raw materials. After the construction of the great pottery plant at Newell, W. Va., the company transferred him to the latter place, where he tested all the materials used and had charge of the purchasing department of this large

In 1908 he received the appointment as assistant ceramic chemist with the Technologic Branch of the U. S. Geological Survey, and in 1910, upon the transfer of the work to the Bureau of Standards, he was promoted to be associate chemist. In this field he enjoyed the opportunities offered to the utmost and worked unceasingly in developing new principles. He realized promptly the value of modern research in regard to colloidal chemistry and proceeded to study the clays and their properties from this standpoint. He was successful in developing new lines of thought which he applied not only to clays, but also to lime hydrate, metallurgical slimes, and other substances.

Mr. Ashley contributed freely to technical literature and he has written articles and papers upon the following subjects: The study of tellurium alloys; the use of the triaxial diagram in the thermal study of slags; a suggested method of studying the gas engine cycle by means of a logarithmic triaxial diagram; the production of lustre effects on glass; the effect of various lime compounds in a white ware body; the diagrammatic study of glazes as regards their crazing and shivering limits; the testing of pottery materials; a testing method for pottery plaster; the colloidal content of clays; the control of the colloids in clay; the precipitation of metallurgical slimes and a number of other papers.

Harrison Everett Ashley represented the highest type of mankind; he was an exceedingly kind and genial nature, full of the old-fashioned Yankee humor, of absolute and fearless integrity, unselfish in his labors, always ready to help another and most important of all, a sincere Christian.

He met death bravely and his lips uttered no complaint, though conscious until his spirit departed. His last words were of cheer to his loved ones.

Mr. Ashley left a widow and two young children. His death has destroyed an ideal and happy union of four years duration, he having been married to Miss Eva Susan Greenamyer, of Leetonia, Ohio, on July 3, 1906.

Those that knew him mourn the good man, the loyal friend, the able investigator and scientist, the unselfish worker, the devout Christian. His memory will continue

to live with us.—Rock Products, February 22, 1911.

(Mr. Ashley's splendid work in connection with the lime investigations of the Bureau of Standards, together with the patience and kindness that were always a part of his character have endeared his memory to many of our readers. With them we join in the sentiments so well expressed by his companion, Professor Bleininger.—Ed. Rock Products.)

#### 1901.

ROBERT L. WILLIAMS, Sec., 154 Magazine Street, Cambridge, Mass.

Preceding the smoker during the Congress of Technology the class had a dinner at the Rathskeller April 10. The dinner was

a most enjoyable one and the following men were present: J. T. Scully, W. M. Curtis, E. F. Brigham, R. C. Robinson, W. C. Arsem, W. A. Read, M. Estabrook, J. Colman, W. C. Appleton, Arnold, F. R. Boyd, A. W. Rowe, H. P. Macdonald, J. F. Monaghan, H. T. Chandler, W. W. Walcott, P. Player, and R. L. Williams. —On Decoration Day the annual workhorse parade was held in Boston with 1,365 horses in line and the Lawrence gold medal, the big prize of the day, awarded to a four-horse team, was captured by the team belonging to John T. Scully.—Once more I wish to remind those who have not done so to kindly send in their data for the decennial record book. While we have heard from a goodly number we want to hear from all those who have been associated with the class as well as those who were graduated.—The class is planning an outing June 24 at Nantasket Beach in celebration of our tenth year out and the fun will probably be over by the time this appears in print.—Antoine B. Compau is now located in Grand Rapids, Mich., where he is a member of the firm of Robinson & Campau, architects. He has traveled extensively in Europe for two years.-W. S. Pepperell, as traveling salesman for the Draper Company, Hopedale, Mass., has to do with the complete organization of textile mills beginning with the organization of the company to the final operation of the mills.—A. K. Trenholme is an instructor in forge shop practice and machine shop practice in Washington high school, Portland, Ore.—The following changes in addresses have been recently received: A. J. Eveland. 60 Congress Street, Boston, Mass.-W. I. Martin, 5212 South Park Avenue, Chicago, Ill.—P. W. Moore, 1621 Judson Avenue, Evansston, Ill.-W. T. Aldrich, 31 West 12th Street, New York, N. Y. -L. M. Backus, 722 Leary Building, Seattle, Wash.

## ROBERT S. LITTLEFIELD

It is with deep regret that I have to announce the death of one of our best and most loyal classmates, a member of the class executive committee, Robert S. Littlefield, who passed away May 12. He was born June 9, 1878, in Somerville, Mass., was graduated from the Somerville High School in 1896 and from Technology in 1901. His course was Naval Architecture and after graduation he went to Cramp's Ship Yard in Philadelp ria. In 1903 he entered the firm of James H. Roberts Company, manufacturers of transmission machinery, Cambridge. He was married in 1905 and lived first in Malden and later in Newton Centre.

#### 1902.

F. H. Hunter, Sec., 75 Park Street, West Roxbury, Mass.

On Monday, April 10, the class attended the smoker, which formed the feature that evening of the Congress of Technology.

A dinner was served at the Boston City Club with the following men present: Ames, Ballard, C. H. Boardman, Jr., Bourneuf, George, Hall, Hamblet, Hunter, Mahar, Marvin, Millar, Nickerson, Pendergast, Robinson, Sawyer, Shedd, Simpson, Stillings, Thurston, Walker, Westcott, Whitney, Whittet, Williams and Williston. There was no formal program, but a very good time until the hour arrived to leave for Symphony Hall. At the smoker, besides the above, were C. Boardman, Childs, Fitch, Fletcher, Geromanos, O'Neill, Patch, Pitts, Sears and Starr. Mullaly who was playing in the band, got away long enough to shake hands all around with the bunch. With thirty-six men in the hall, it was the largest assembling of '02 since the All-Tech Reunion in 1909, and it was pleasant to see so many classmates who had not been out for some years past. At the banquet the following evening, were Ballard, Childs, Everett, Farmer, Geromanos, Marvin, O'Neill, Joe Philbrick, Pendergast, Starr, Howard Turner and Rob Whitney.—At Chicago on the same evening, at the dinner of the Northwestern Association, were W. N. Brown, Currey, Foote, Lockett, Nash, Reed and Reynolds, which Lockett reports as the largest gathering of '02 men, on record, in Chicago.—The annual dinner of '02 in New York was held at the Technology Club on April 22. were present Alsberg, Annett, "Dimmy" Bartlett, Ned Baker. Davis, D. R. Franklin, A. E. Hansen, Mathesius, Place, Grant, Taylor and Wemyss. This is also a record in numbers for New York. The dinner was followed by a pleasant social evening. The annual meeting and class supper was held at the Hotel Oxford, Boston, on June 6, as a preliminary to Tech Night at the Pops. The following classmates were present: Collier, Fitch, Hall, Haskell, Hamblet, Hooker, Hunter, Mahar, Millar, Mullaly, Nickerson, Pendergast, Joe Philbrick, Shedd, Stillings, Robinson, Thurston, Whittet, Rob Whitney, and "Doc" Williams. Haskell, who has not been at a Tech affair for several years, was warmly wel-The business session was opened by the presentation to the secretary of a handsome loving cup with the inscription: "Presented to Frederick H. Hunter by the Class of 1902, M. I. T. June 6, 1911, In Recognition of the Good Fellowship Resulting from his Efforts." Though completely surprised the secretary tried to respond to "Doc's" speech in making the presentation. The cup, which was of generous size and full, was passed around the table, that all might share in the "Spirit" of the affair.— After the cup was emptied, and the secretary had got down to earth, the business of the evening was concluded by the unanimous election of the following officers for one year: President, R. B. Pendergast, vice-presidents, for Boston H. E. Stillings, for New York Grant S. Taylor, for Chicago Kenneth Lockett was reelected. For secretary and treasurer Hunter was re-elected for a second term of five years, and after a long drawn out contest attended by much hard feeling. Arthur Nickerson was re-elected

assistant secretary. At quarter of eight, a parade was formed and with the big blue banner flying, Mullaly on the drum and Hall on the bugle, we marched up Huntington Avenue in defiance of the drizzling rain. Our advent at the hall drew much applause as we were the first class that ever paraded into the Pops with a drum. Ames, Crowell and Lewis joined us at the hall, and Simpson was visible in the '02 section of the balcony. The Pops, though very enjoyable, were quieter than some years, but '02 was not to blame for that.—Other class news has come in as follows: On April 13, a dinner of Tech men was held at the Kojunsha Club at Tokyo in honor of Jasper Whiting, '89. Seven men were present out of the fifteen in Japan, and steps were taken to organize a Tech Club of Japan. Report of this meeting is given elsewhere in the Review, as McIntyre, '02, was at the dinner and sent in a report. His name is the only one besides Mr. Whiting's that the secretary dares to try to write. - Cates is superintendent of mines for the Ray Consolidated Copper Company, at Ray, Arizona.—Crowell is with Stone & Webster, as the latter are now handling the "Boston and Providence" proposition.—"Doc" Williams is now "Prof." Williams, having been elected to the Faculty at the recent meeting of the Corporation.—Hall is with the Kinney Manufacturing Company at 100 Boylston Street, Boston.—Matthies writes that he is doing general engineering work for the Western Electric Company in Europe, having headquarters with the Bell Telephone Company, 18 Rue Bouderwyns, Antwerp, Belgium. Mullaly's address is 18 Worcester Square, Boston.—Stillings, 11 Westminster St., West Somerville, Mass.-Lockett, by the renumbering of streets in Chicago is now at 14 W. Randolph St.— Grant Taylor's address is 117 Remsen St., Brooklyn; he is with the Corrugated Bar Company, at 17 Battery Place, New York City.—Millar has moved his office to 178 Devonshire St., Boston. -"Doc" Williams was re-elected as secretary of the Technology Club at the annual meeting on May 9, and L. E. Moore was made a member of the Council.—Herbert S. Walker writes from the Ewa Plantations, Ewa, Hawaii, as follows:

Am mailing you a publication which has been my main excuse for drawing a salary during the last few years. I left Manila last July for Europe via China and the Trans-Siberian railroad; took a motorcycle trip from Bruxelles to Gibraltar, stopping over for a few days' visit with Lind, '02, in Paris. My present address is not a very permanent one and I really have no idea where I may be located next year, probably somewhere in the tropics.

—Archie Gardner writes from Estacada, Ore., that he is engineer in charge for the Puget Sound Bridge and Dredging Company on a large hydro-electric development which they are constructing for the Portland Railway Light and Power Company. He reports attending the meetings of the Technology Club of Oregon and meeting Daly and Edwards there.—Arthur Clapp and Jimmy Avery

have both been seriously ill with pneumonia in recent months, but both are now, happily, recovered.—Warren Taylor writes from Union College, Schenectady, that though the engineering school is small, they have just moved into a new building and are now well equipped to handle their work.—The engagement of Jason Mixter to Miss Dorothy Fay of Boston and of his brother Charles to Miss Helen McIntosh of Milwaukee will interest all members of the class. The former engagement was announced soon after the last April Review went to press, and the other a few weeks later.

#### 1903

F. A. Olmstead, Sec., Oregon City, Ore. R. H. Nutter, Asst. Sec., Lynn, Mass.

The class was well represented during the Congress of Technology in April both at the smoker and at the dinner. Previous to the smoker the fellows gathered for an informal dinner in the Brunswick Café, at which the following were present: C. H. Avery, Loughlin, Taylor, Comer, Foster, Pelton, MacDonald, Capelle. Eaton, Peaslee, Sears, Thwing, Bradshaw, S. P. Brown, Fales, Wing, Davis, Ferguson, Greene, Bartlett, Lyon, Jackson, Haddock and Nutter.—The 1903 men who attended the dinner at Symphony Hall were: Eaton, White, Taylor, Eustis, Scholtes, M. H. Clark, Denham, Foster, Mason, G. M. Green, and Haddock.—On June 6th, before going to Symphony Hall for the annual Tech night at the Pops, the boys again assembled for dinner at the Brunswick. George Swett ordered this dinner and he certainly deserves a vote of thanks from the class for it was about the finest dinner 1903 has ever enjoyed. The following were "on deck": Sears, Gleason, McInerney, Fales, S. P. Brown, Wing, Scholtes, Thwing, Magnitzky, Nutter and M. H. Clark. Although there was a cloudburst near Copley Square, the rain did not dampen the enthusiasm in the least. It was unanimously voted to proceed with plans for a day's outing of the class to be held during June or July, and a committee consisting of Thwing, Sears and Gleason was appointed to arrange for this affair. When the plan has been worked out notice will be sent to every member of the class and every 1903 man is expected to attend. No excuse for absence will be acceptable. If business interferes, "cut out the business." -The following new addresses are noted: Harold Osborn, North Adams, Mass.; P. B. Rice, Williamsport, Pa.; Irving Williams, Olean, N. Y.; J. M. Gammons, Eng. Dept. Mo. & Ks. Tel. Company, Kansas City, Mo.; C. M. Hardenbergh, Southwestern Milling Company, Kansas City, Mo.; W. C. Avery, 53 Linden Street, Newton Upper Falls, Mass.; Hewitt Crosby, Atlantic Gulf & Pacific Company, Whitehall, N. Y.; F. G. Cox, Dallas, Tex.; O. P. Scudder, San Francisco, Cal.

The class wishes to extend congratulations to Alexander Healy

of Ogden, Utah, who was married April 4 to Miss Edith Holden of Boston. Mr. and Mrs. Healy went South for an extended wedding trip, after which they returned to their new home in Buffalo, Wyo.

1904.

EVERETT O. HILLER, Sec., Technology Chambers, Boston, Mass. Addison F. Holmes, Asst. Sec., Mass. Inst. of Tech., Boston, Mass.

The most important events of general interest since the last REVIEW was issued were those of the Technology Congress. Record of the events has appeared in so many different forms that all must be familiar with them. 1904 was well represented, about twenty men attending the class dinner and Pops while about half that number attended the banquet. Class headquarters were at the Copley Square Hotel where we gathered before dinner on the first night of the Congress. A satisfactory and unusually "live" dinner was enjoyed by all, a large table accommodating all in the regular dining room of the hotel. The fellows stuck together and enjoyed a good old-fashioned Tech night at the Pops. The banquet was less hilarious, but very interesting and inspiring. The New Technology was the spirit of the evening and undoubtedly received much impetus from the enthusiasm and publicity of the Congress. Plans were matured for the annual week-end excursion to North Scituate where we were to stop at the Cliff House and have the use of the local country club links and courts. A few days before the date set, we received notice that, due to crowded conditions for its own membership, the Country Club privileges would not be available. This with the comparatively small number of men who sent in favorable replies led to the indefinite postponement of the event.—We have word from George R. Ainsworth that he is with the Edward F. Caldwell Co. of 36 West 15th Street, New York. He has been with this company since graduation in the manufacture of gas and electric light fixtures.—We have the following from Guy C. Riddell:

I have been out here at the smelter at East Helena ever since the fall of '04 working along through the various departments and was lately made superintendent of the plant, succeeding Philip A. Mosman, another Tech man of '87. The East Helena plant is one of the chain of A. S. & R. Co. smelters in the United States and Mexico. We do a custom lead business here getting away with about 70% of the total output of the Cœur d'Alene district of Idaho. I have been in Boston only once since graduation. In 1907 I went back to get married. Mrs. R. (who was a Newton girl) likes Montana and the northwest fully as well as I do. This is saying a good deal.

—R. B. Pendergast has got a bump of loyalty. He was three years with '02 and is now their president. He was graduated with '04, and has always shown much interest in '04 affairs, even to the extent of retaining his membership in the class organization, and payment of dues. We respect the prior claim of '02, but are

glad to note his fraternal spirit for both groups with whom he was associated. We shall always welcome him as a classmate.

—We have the following from Sperry, Boulder, Colorado, which is here quoted in full:

There is not much show of this ex-member of '04 landing at the reunion this year, but he wishes he could be there to frivol with the fortunate ones that do appear, just to show that the years since leaving Tech have not quenched in him what the poets name "the fire of youth." Best wishes to every one of you! The

circulars I get unite in asking for personal items so here's a résumé:

As some of the men in the class may remember, I came down with consumption while at the Stute and had to come out to Colorado the summer of 1903. Since that time I've been trying to get a new start in life with the aid of this fine climate. Last June I was graduated from the University of Colorado, Boulder, Colorado, receiving the degrees of Bachelor of Science in Civil Engineering, and Bachelor of Arts. At the close of the year I was one of those elected to the honorary scientific society of the Sigma Xi, and at Commencement played the part of Benedick in the senior play "Much Ado About Nothing." The senior play, usually a comedy of Shakespeare's, is given each year under a group of trees on the campus. Thanks to co-education the senior men have no chance to acquire feminine grace in the women's parts, as some of us had to do in the Tech show. I have not had much chance to connect with the members of 1904 while here, but have always tried to keep up with Tech affairs, though not able to graduate there, and hope when I get the engineering job I am now hunting for that fortune will bring more old Tech men my way.

—There is little to be added to what the daily papers have told of the extraordinary air feats of "Volts" Ovington. He is consistently carrying that which seems to be his life policy *i. e.* being in the lead. It is a habit he got as a hurdler and general athlete, as an electrical specialist and a motorcycle expert, and finally as the most sensational aviator in America if not in the world. Here's the heartiest wishes of all his classmates for safety and the brilliant success which his nerve and exceptional mind ought to have as its reward! Congratulations on his recent marriage are in order and sincerely offered. The following is taken from the *Record*:

Earle C. Ovington, Boston's newest aviator, is a Technology man and also a graduate of the Blériot flying school at Pau, France. That country, he is convinced, is the place for anybody to study if he is to make any record in aviation. The Frenchmen have both the great variety of machines and speed. Ovington is looking for 140 miles an hour at least in 1911, and indicates that he is ready to drive one at that rate. He expects to go out for a number of cross-country prizes during the summer and fall.

—Phil Sweetser was married on May 6 to Miss Helen Bradford Pratt at Newton Highlands, Mass. Mr. and Mrs. Sweetser are now at home to their friends at 130 Lincoln St., Newton Highlands, Mass.—We were pleased to receive the announcement of the marriage of William Walter Cronin to Miss Rosemary Hughes at Syracuse, New York, on April 28. They are at home after July 1, 207½ West Borden Ave., Syracuse.—Some of the asides noted on the Technology Congress return post cards were

of much interest to the secretary. Herewith some are quoted. -Lounsbury: "Am trying to find out which class I belong to. Pav dues in both and love both '03 and '04. No chance to get East in 1911. Too busy bringing up a new co-ed and doing other stunts in the great northwest."—Galusha, Plymouth Building, Minneapolis, Minn.: "It is not my present intention, etc.—How I hate to write it!"—W. J. Gill, Jr., Washington, D. C.: "Am mighty sorry I cannot be on hand."—Lee Phillips: "I regret that my geographical location compels me to answer negatively to all your inquiries."-These with many others show a live interest among the classmates at a distance. The spirit shown should be reflected upon by those members of the class located near Boston who show so little interest in class affairs.—"Gussie" Munster has just been promoted to engineer of tests for the New York, New Haven & Hartford R. R. with headquarters at South Terminal, Boston. It is a just recognition of extremely faithful and hard work and heartiest congratulations are offered. The position is an important one and places the one who occupies it in high standing professionally.—The secretary is now located as above noted and it is his earnest wish that any '04 men who come to Boston will look him up.-The following changes of addresses have been received: Edward L. Edes, North Western Pacific Company, Dyerville, Cal.-G. Neville Wheat, 506 Fairview Avenue, Houston, Tex.—Stephen E. Keiffer, 78 The Uplands, Berkeley, Cal.— W. Brenton Boggs. 430 Sterling Place, Brooklyn, N. Y.

## WILLIAM STICKNEY

Memorial services were held at Trinity Church, Newport, R. I. for William Stickney of New York, who died suddenly May 27 in Guatemala. The *Boston Herald* prints the following account of his life:

William Stickney was born at Bournemouth, England, in 1877. He attended Cutler's school in New York and was graduated from Harvard with the class of 1900. He then spent three years at the Massachusetts Institute of Technology studying engineering and naval architecture, and completed his training in the latter branch at Glasgow University, Scotland.

After spending three years at the Fore River Shipbuilding Company at Quincy, he left for Telluride, where he became interested in a mining proposition. It was here that he met with an unfortunate accident while out riding and fractured his

skull. From the effects of his injuries he never completely recovered.

In November, 1909, he joined the engineering force of the Panama canal, but as the work entailed too severe a strain on him, he became identified in February of this year with the United Fruit Company, in whose service he was when he died.

While in Harvard, Stickney was a member of the Hasty Pudding Club, Zeta Psi and Porcellian clubs, and was a member of the Tennis and Racquet Club of Boston. He was universally popular wherever he went. Always much interested in all forms of sport, he was especially keen about tennis and yachting.

His unfailing geniality, keenness of mind and quiet sense of humor endeared him to all who came into contact with him, and his sudden death will deprive

many of a genuine friend.

1905.

GROSVENOR D'W. MARCY, Sec., 246 Summer Street, Boston, Mass.

As usual we have several weddings, etc., with which to begin the '05 notes for this issue. Charles H. Clapp and Miss Mary Regina Brennan were married at Devil's Lake, North Dakota, Their address will be 18 Atlantic St., South Boston. -Gorham Crosby writes from New York, that George I. Rhodes married Miss Olive Parker Wallace of Hillsborough, N. H., on May 11, also that he was visited by Lovell H. Parker with his wife and year-old daughter, Margaret. Parker is assistant state engineer, at Albany, N. Y.-Harry M. Lynde was married on June 28 to Miss Amy L. Edmester of Danvers, Mass. Lynde is now at Walden, N. Y.—Samuel Shapira and Miss Rose Guterman were married in New York City on June 4.—J. B. Reinhardt and Miss Alberta H. Laine were married on November 29, 1910. Reinhardt's address is 41 Joseph Avenue, Rochester, N. Y.-The engagement of Roger P. Stebbins and Miss Ada G. Walker of New York is announced. Stebbins is now at Groton, Conn., where the Electric Boat Company have moved their plant.—Charles H. Johnson announces the birth of a son, Alan B. Johnson, May 10.—Harry P. Charlesworth also writes us of the birth of a daughter, Rosemary, May 16, and E. W. Washburn reports the arrival of a son, William deVeer Washburn, born May 20.-Irving H. Cowdrey is trying to reconcile his friends' statements that his daughter, Corinne, born October 8, is a pretty baby and looks like her father.-Jimmy Barnes writes: "We have a new girl in our family, Mary Ann Barnes, born April 21. Am glad '05 showed up so well at the Congress, as I've always had a sneaking notion that '05 is the best class there ever was, anyhow." This makes another sister for the class baby.—We learn with pleasure that our old friend and confirmed bachelor, Bob Lord, has finally succumbed, bought a sideboard, and will soon lead to the altar Miss Rebecca Poole, of Westbrook, Maine.—'05 men are beginning to show up in public life, and now and then get into the news columns.—Oscar C. Merrill has been appointed chief engineer of the U. S. Department of Agriculture, forest service. He is in charge of all the engineering and water-power work of the service, with headquarters at San Francisco. The field is divided into six districts, with a district engineer and headquarters at Missoula, Ogden, Denver, Albuquerque, San Francisco and Portland. The chief work consists of examination of power projects and the negotiation of leases. About a half-million horse-power will be handled this year.—The following was clipped from a Boston daily:

Robert N. Turner of Waltham is now in his second year in the house, and has made his mark as a brilliant and able debater and a young attorney of high character. A report having spread that he could not afford to neglect his practice to take a third year in the house a number of his constituents are starting a movement to

urge him to reconsider. He was one of the most valued members of the judiciary committee last year, and this year is a member of the committees on election law and on education.

Bob has done mighty good work on several important bills, notably the Bar and Bottle bill, the Peaceful Picketing bill, and of especial interest to us, the bill for State Aid for the Institute.— Harry M. Nabstedt is engineer and superintendent of Public Works for the town of Stoneham.—Ralph R. Patch is commissioner of Public Works for the third year, and says the whole responsibility of running the highway, water, and sewer departments is up to Nabstedt, that he is making good, and that it is a great help to him to have a man like Nabstedt in the position of superintendent. -The Boston papers have lately been filled with the exploits of two '05 men who have been practically the whole show at the Wal-Earle F. Ovington, who started out with tham Aviation Meet. '04, but realized that to become famous he should take his last two years with '05, has been performing wonderful stunts with the Blériot monoplane, equipped with a 70 HP Gnome motor, which he brought back from France this spring. Hs has been timed up to 70 miles an hour, carried messages to Taft, Foss and Fitzgerald, and is only waiting for someone to put up a \$10,000 prize to fly from Boston to New York.—Harry N. Atwood, who was with us our freshman year, is flying a Burgess-Wright biplane. He duplicated most of Ovington's stunts, and as a finale relayed several newspaper men from Waltham to Lowell, Lawrence, Manchester, Concord and Lake Winnipesaukee, making over 65 miles an hour at times, on the way.—Robert F. Luce is now commanding officer of the U.S.S. Romblon in the U.S. Coast and Geodetic Survey Service. He has charge of the combined field work in triangulation, topography, and hydrography among the islands near southwestern Luzon. His address is C. & G. S. Office. Manila, P. I.-J. A. Pitts is back on a six months vacation from Johannesburg, South Africa, where he has been since graduation, with Frazer and Chalmers. He says it seems too good to be true to be back again.—C. A. Emerson, Jr., is principal assistant engineer with the Pennsylvania Department of Health, at Harrisburg, Pa.—Joe Brown is N. Y. manager for the Sullivan Machinery Co. He is trying to help the city build its new aqueduct, and hoping for a new subway.—Arthur Belding has gone over to London as assistant manager for the same company.-Edward C. Smith is superintendent of the Toronto factory of the Canadian National Carbon Co., Ltd. He was married August 15, 1908, to Miss Edna Grace Fowler of Fremont, Ohio.—W. G. Houskeeper is engineer in charge of equipment and manufacture of Westinghouse-Cooper-Hewitt Mercury Rectifiers, with the Westinghouse Lamp Co., Bloomfield, N. J. During the past three years he has invented and developed a semi-automatic machine for making tungsten lamp filaments in long lengths used in all "Wire Type" Westinghouse tungsten lamps. With H. S. Dunning he invented and developed a "Watts-per-candle" photometer for instantly and automatically rating incandescent lamps.—Z. Carleton Staples is master in commerce and law at St. John's School, Manlius, N. Y.—E. L. Hill has been appointed superintendent of the electrical cable plant of the American Steel and Wire Company at Worcester.—Bill Motter is manager of the new Canada Iron Mines, Ltd., with headquarters at Trenton, Ont.-W. S. Richmond has been for five years with the U.S. Lake Survey, and is now in charge of the hydraulic party of that service. His headquarters are at Detroit, and he is at present gauging the flow of the St. Lawrence river. He was married July 2, 1910, to Miss Alice Mabel Smith of Detroit.—Norman Gerhard writes that they are rushing the aqueduct at Cold Spring, as New York City needs water, and that he often sees Wise and Breitzke.—Arthur E. Russell has left the Bath Iron Works, and is now with the machinery division of the U. S. Navy Yard at Boston.—V. H. Paquet is still with the Bath Iron Works, and has been working on the interesting problem of balancing the four cylinder, triple expansion engines of the steamer Moosehead, without the use of counterbalance weights.—W. P. Bixby recently resigned his position with the Erie railroad and is now engaged in shop management work with the Union Wadding Company, Pawtucket, R. I.—Bob Gardner is engineer with the T. A. Scott Wrecking Company, Boston, and has interesting tales of handling wrecks along the Atlantic coast.—Carl Danforth writes that very fortunately he escaped without any loss or damage in the big fire in Bangor on April 30, though most people there suffered heavy damage. Inside of five years they expect to be built up again, bigger and better than ever.—Philip Castleman has just received an M. D. degree from George Washington University, and is a candidate for the degree of M. S. in October. —George Fuller writes:

Am graduating this year in Course I with the class of 1911, six years late, but will always be an '05 man, for that certainly is the best class ever. Expect to work for the N. Y. State Highway Commission.

—F. O. Sprague is starting a laboratory in the sole leather plant of the Cattaraugus Tanning Co., Olean, N. Y. The secretary has interesting letters from Ros Davis, Harry Wentworth, and several others, but is saving them for the next news number, as they will be just as interesting then, and unless you fellows do better than you have done previous summers, he will be short of news in September. Please help him avoid such an unfortunate state of affairs.

E. G. Schmeisser, from the electrical engineering course and formerly assistant engineer in the department of electric traction

of the Pennsylvania Railroad Company, has been elected second vice-president of the Wiener Machinery Company of New York.

RALPH R. PATCH, Sec., 15 Lincoln Street, Stoneham, Mass.

Early in June a letter was sent to members of Courses I & XI asking for statistical information and an autobiographical report. Of those replying 75 per cent. are following the line of work for which they prepared. Not one man but what would go back to Tech if he were to prepare for life's work again. Just one half are married and between the thirteen married ones there are ten children. Only eight are sure that their boys will go to Tech. Twelve get as much remuneration as they hoped they would, four do not, and ten didn't think. If any '06 man reading these notes thinks it worth while to follow this method of news gathering through all the courses just take the trouble to say so and if you have any suggestions to offer on future letters as to information you want included let us know and we will include it.-We have received a copy of a paper entitled "A Scientifically Designed Street Lighting Unit" by Herbert S. Whiting, presented at a meeting of the New York Section of the Ill. Eng. Society. Herb is an authority on this question.—Allen Ashley is selling for the New York office of the Westinghouse Elec. and Mfg. Co.-With pleasure we note the arrival of Margaret Cole Taylor to Mr. and Mrs. DeWitt McClure Taylor, Pittsburg, Pa., April 4, 1911.—Also the marriage of Harry Hall Cook to Miss Ethel Gertrude Hubbard at Norwood, Mass.—On the 9th of April the New York bunch got together at the Technology Club. Only four men appeared, Whiting, Thompson, Littig and Hinckley. The dinner as usual melted into the time-honored game of pool.—Robert S. Clark called in to see the secretary. He is with the Reading Iron Co., Somerset Coal Dept., Kimmelton, Pa., as master mechanic and electrician. He says "working like a son-of-a-gun on an average of twelve hours a day and have my troubles but manage to keep a smile on part of the time."-H. P. Barnes says that he does not believe in writing autobiographies although he will probably be interested in those appended here.—Terrell Bartlett was engineering assistant on the Pittsburg division of the Pennsylvania lines west of Pittsburg in 1906 and 1907. The next year he was recorder and chief inspector of the Detroit River Tunnel Company, and in '08 was engineer for the chief inspector of the United States army, department of Texas. He then entered independent practice at San Antonio and in '09 became a member of the firm of Bartlett & Ranney (Willis Ranney, '07), civil and structural engineers, at San Antonio. The firm is engaged in a number of important undertakings, but by far the most important is the engineering work on the great Medina six million dollar irrigation project financed by Dr. Fred S. Pearson, which is to irrigate the valley of the Medina river.—F. A. Benham entered the engineering department of the New England Telegraph and Telephone Company, in Boston, in 1906 where he is still engaged in general engineering work.—L. G. Blodgett has spent most of his time since '06 in Louisiana and in Mississippi, constructing steel and concrete railroad bridges. He is now located in Kansas City with the A. M. Blodgett Construction Company.—George W. Burpee went with the Louisville and Nashville Railroad Company in 1906, and the next year entered the employment of Westinghouse, Church, Kerr & Co., New York City, where he is now located.— C. E. Carter was with the Oregon Through Line two and one-half Since then he has been engaged in irrigation work. He is with the Twin Falls North Side Land and Water Company, Jerome, Idaho.—E. S. Chase is chemist in charge of the sewage purification works, Reading, Pa.—Arthur M. Chidester says that he has been hunting and working for health and having found that got married. He is at 446 South Printer Avenue, Whittier, Cal. -George L. Davenport was connected with the engineering department of the Pennsylvania Railroad for a year and has since been in the employ of the Atchinson, Topeka and Santa Fé Railroad in a similar capacity. He is located at 1235 West 49th Street, Los Angeles, California.—Sidney L. Davis is with the Corn Exchange Bank, Broadway, and 28th Street, New York City.-Norman P. Gerhard is with the New York Board of Water Supply, first as assistant engineer in the reservoir department and more recently in the New York aqueduct department.—Samuel A. Greelev was with Hering & Fuller, hydraulic and sanitary engineers of New York City, for four years, designing and constructing sewage disposal works, water filters, etc. In 1909 he became resident engineer on the construction of the Milwaukee refuse incinerator and is now superintendent in charge.—George R. Guernsey was an assistant in the department of Civil Engineering at the Institute for a time and then became connected with the reclamation service in charge of a surveying party on preliminary work and location of canals and distributing systems. He is now with N. W. Harris & Co., incorporated, Boston.—Herbert W. Harvey was draftsman for the Board of Water Supply, New York City, and then became connected with the O'Rourke Engineering Construction Company of New York as engineer on the North river tunnels. In 1909 he became designer in the Passaic Valley Sewerage Company of Newark, N. J.—George F. Hobson did engineering work on the East river tunnels, New York, and the next year was engineer in charge of earth and dam irrigation system, Rocky Mountain Cattle Company, Wyoming. He then became assistant in the engineer's office in the city of Lowell, Mass., and in 1909 was superintendent of construction for the Boston Water Department. He is now computer in the super-

vising architect's office, Washington, D. C.—Charles T. Leeds entered the United States army as lieutenant and is now captain of engineers. He was placed in independent charge of an engineering district while the rest of his class at West Point were still assistants. He is in charge of the defensive works at San Diego. Cal., and of the dredging improvements of the harbor of San Diego and Los Angeles, Cal. He is also in charge of the distribution of breakwaters at San Pedro and St. Luis Obispo, Cal. a member of the harbor line boards of San Diego and Los Angeles, also of the California débris commission which regulates hydraulic mining in California.—Clifford Lynde became connected with the Pennsylvania Railroad in the Maintenance of Way Department, and the next year was assistant engineer with the Board of Water Supply, New York City. He is still connected with the Board of Water Supply and has been connected with the designing division and the Esopus division on inspection. He is now at Walden, N. Y., as assistant to the engineer of the Newburg division.—Henry M. McCue has been rodman and transitman for the Metropolitan Park Commission of Boston; transitman for the Boston and Northern Street Railway; assistant engineer for the Charles River Basin Commission, and assistant engineer for the Massachusetts Highway Commission.—R. R. Patch is now serving his third year as commissioner of public works in the town of Stoneham, Mass. He entered the service of the Massachusetts State Board of Health in 1906 and after remaining there for a short time became assistant superintendent of the E. L. Patch Company, manufacturing pharmacists and chemists, Stoneham, Mass. He is trustee of the Stoneham Five Cent Savings Company and a trustee of the Stoneham high school alumni loan fund.—Mark H. Place has followed the railroad engineering most of the time since leaving Technology. His work has been largely in Montana and California as well as in Minneapolis and Milwaukee. He is now employed by the Illinois Tunnel Company of Chicago, who are installing the automatic telephone system there.—E. B. Pollister planned and constructed the city water works and electric light plant of Robinson, Ill., and is now manager of them. He says that he has a fine plant using a Diesel oil engine for power. The switchboard cost is .007 per kilowatt hour which is less than the cost in the city of Boston.— E. M. Read has been in the contracting business ever since leaving the Institute, and is now connected with the Canadian Pacific Railroad in the Rocky Mountains.—Arthur L. Sherman has been connected with the New York Board of Water Supply for five years. At present he is working on the Catskill aqueduct.—Dana M. Wood worked through several grades up to the position of assistant engineer in the United States geological survey, water resources branch. Last year he became connected with Stone & Webster of Boston.

Shields Burr's engagement was announced in June, to Miss Edna Hassett of Waltham.—J. H. Polhemus has recently made a trip around the circle to find out what other people are doing in the mining and milling lines. Polhemus is manager of mines for the American Zinc Lead and Smelting Company, who have extensive interests in various parts of the United States and who made the biggest mining deal in the history of the Joplin district, a few months ago, when they took over about 640 acres north of Webb City, in the heart of the richest sheet ground in the district, and which is covered with mills.

#### 1907.

Bryant Nichols, Sec., 143 Garland Street, Everett, Mass. Harold S. Wonson, Res. Sec., 149 East Main Street, Gloucester, Mass.

# I. On the Part of the Secretaries

Another year has passed, and it is now four years since '07 joined the ranks of the alumni; 4 plus 1 is 5. Next year is our fifth anniversary! Prepare for it now. Plan to be in Boston. Think of the way you would like to celebrate, and then put your thoughts on paper and send them to the secretary. Something is going to happen next June in the '07 camp. What shall it be? We welcome suggestions.—It is hardly necessary for the secretary to make any formal report for the year. You who have followed the Review notes, and have received letters, notices and ballots, have a pretty good idea of what the secretary has done. You will find further evidence of his work in the following pages. He asks you to assist by simply writing him news and sending in changes of addresses. Very easy and yet only about one half of the class do it. If you are in the other half, follow the impulse of this moment and write. Harold S. Wonson is the new assistant to the secretary, Bigelow having resigned, and we shall try to be even more active in our correspondence.—The following men have been elected (by sixty ballots out of 300 sent out) class officers for 1911-1912: President, Alexander Macomber; vice-presidents. Donald G. Robbins Oscar H. Starkweather; secretary-treasurer, Bryant Nichols; resident secretary, Harold S. Wonson; auditors. Lawrence Allen, Arthur K. Tylee; member executive committee, Emerson H. Packard; nominating committee, John H. McMillan. Edward F. Kelly, Harold P. Farrington.

#### REPORT OF TREASURER FOR 1910-1911

			Re	ceij	its						
On hand July 1, 1910										\$42.25	
Class dues and exchange .										165.26	
Class dinner, Dec. 10, 1910								٠.	٠.	24.00	
Class dinner, Feb. 11, 1910							٠.			12.00	
Class dinner, April 8, 1911											
Interest											
											\$286.29
		E	xpe	ndi	ture	3					
Class dinner, Dec. 10, 1910										\$23.75	
Class dinner, Feb. 11, 1911							٠.			15.50	
Class dinner, April 8, 1911											
Printing											
Postage										10.82	
Alumni Association for clerica	w	ork								19.69	
Total Balance on hand July 1, 1911										\$135.21	
Balance on hand July 1, 1911										151.08	
							10				\$286.29

It may be of interest to make a few comparisons between this report and last year's report. First of all, note that we have cash on hand now amounting to \$151.08 against \$42.25 last July. Second, note that \$165.26 has been received for class dues this year against \$63.00 last year. Then note that the total expenditures for this year are \$135.21, while last year they were \$159.28. Also, that of this year's total expense, \$81.40 of it was for class dinners, and that for these same dinners \$78.00 was received. These figures show that our treasury is in a very healthy condition.

# II. What '07 did at the Congress of Technology

'07 began the festivities connected with the Congress by holding one of the best dinners we have ever had since graduation. The dinner was held at the Technology Club, Boston, and there would have been ample room in the dining room if only those men had come who had signified their intention of so doing beforehand. As it turned out, many other fellows showed up in addition. In fact they kept coming in bunches, so that Macomber and the secretary became quite worried for fear the accommodations would be insufficient. Everyone was so glad to be with the old bunch again, however, that he did not mind having to sit eight at a table meant for four, nor having to sit nearly out in the hallway. Forty-three men partook of the good things provided, including several fellows who had not appeared at a previous dinner since June, 1907. We were especially glad to have with us Albert E. Greene of Chicago who read a paper at the Congress and "Stud" Leavell, who came all the way from Cobalt for the occasion, and with the good Bursar, our honorary member, livened

things up in good shape. The following men were present: Charlie Allen, Lawrie Allen, F. W. Amadon, P. J. Colvin, Ralph Crosby, Jim Garratt, Albert Greene, Arthur Jealous, Alexander Macomber, J. T. Mahar, W. H. Martin, "Tucky" Noyes, P. R. Nichols, George Norton, W. S. Moore, Winsor Soule, W. B. Coffin, Robert Rand, W. A. Rich, Jr., "Kelly" Richards, Don Robbins, Oscar Starkweather, Phelps Swett, P. B. Walker, Harold Wonson, Ralph Hudson, "Stud" Leavell, H. L. Fletcher, Al Pope, E. H. Wing, Gilbert Small, E. V. Potter, Raymond Parlin, Harry Crohurst, H. R. Hall, H. R. Draper, H. W. Mahr, Walter Bigelow, "Becky" Sharp, Arthur Tylee, Bursar Rand, and Bryant Nichols. After the dinner we marched up Huntington Avenue to Symphony Hall enthusiastically bearing aloft the banners of the class of 1868 and of the Technology Club of Minneapolis, of which Wonson had the custody. In addition to the fellows named above, the following joined us at the smoker: "Tom" Gould, Bill Woodward, J. P. Hinckley, O. L. Peabody, George Otis, H. S. Wilkins, Sidney Wells, R. K. Taylor, S. E. Rockwell, and M. E. MacGregor. certainly had a jolly time in the '07 camp on the floor of Symphony Hall that night. At the banquet on the following night ten of the boys showed up: Macomber, Lawrie Allen, "Stud" Leavell, Harold Wonson, Oscar Starkweather, George Norton, Winslow Robinson, H. W. Mahr, "Tucky" Noyes, and Bryant Nichols.

## III. Married Men and Class Babies

In the July number last year a list similar to that below was published, and as it caused so much favorable comment, and as there have been so many additions to the list during the past year, it seemed appropriate to print the names as follows:

Name	Married	Children	Born
Allen, C. E.	Sept. 10, 1910		
Allen, Lawrence	Jan. 18, 1908	Lawrence Allen, Jr.	Aug. 28, 1909
Allen, L. L.	Oct. 28, 1908	Richard Merritt Allen	March 4, 1911
Ashenden, R. C.	June, 1908	R. C. Ashenden, Jr.	Sept. 6, 1909
Baker, C. E., Jr.	May 6, 1910	It. C. Historiden, br.	DCD4. 0, 1000
Black, A. S.	Dec. 2, 1908	Alice Baker Black	Oct. 3, 1909
Boles, E. D.	March 21, 1908		
Bowen, C. A.	Oct. 15, 1909	Til Till:	37 1 11 1010
Bragdon, C. R. Bryant, G. H.	June 16, 1909 Date not known	Florence Elizabeth Bragdon	March 14, 1910
Burhans, H. N.	Nov. 24, 1908		
Chaffee, E. L.	June 23, 1909	(Wife died June 7, 1910)	
Chase, H. R.	Sept. 1, 1908	Barbara Chase	May 30, 1909
Christensen, A. O.	Jan. 25, 1911	Will Dillor I	37 00 1010
Coffin, W. B. Crosby, R. H.	May 6, 1909	William Balch Coffin, Jr. Evelyn Fanny Crosby	May 20, 1910
Darling, Miss Maude F.	June 16, 1909 March 19, 1910	Evelyn Fanny Crosby	May 8, 1910
Davenport, L. D.	Sept. 6, 1909		
Davis, J. A.	Oct. 29, 1908		
Dean, C. S.	June 30, 1908		kai
Duncan, H. S.	July 1, 1908	Bernice Louise Duncan	May 12, 1909
Dyer, K. W.	Aug. 8, 1907	Osborne Coe Dyer (Son died July 22, 1910)	Aug. 23, 1908
Emilio, S. G.	Date not known	Grace S. Emilio	July 11, 1909
Gaylord, J. M.	July, 1908	James M. Gaylord, Jr.	July 13, 1909

Name	Married	Children	Born
Gonder, W. B.	Feb. 28, 1910		
Gould, G. S.	Sept. 14, 1910		
Greene Albert E.	June 10, 1911		
Griffin, G. A.	June 18, 1908	Charlotte Sanford Griffin	Jan. 7, 1910
Gupta, B. C.	Dec. 4, 1909	Comela Gupta (girl)	Oct. 11, 1910
Hallett, L. F.	June 14, 1909	Lucius F. Hallett, Jr.	April 16, 1910
Hampton, L. C.	April 21, 1909		
Hanford, J. W. G.	Date not known	Wales Daile Wastines In	4
Hastings, H. B.	Dec. 18, 1907	Hudson Bridge Hastings, Jr.	April 14, 1910
Hosmer, H. B.	April 20, 1911 Feb. 3, 1908	Gerald Carden Hudson	Sept. 16, 1909
Hudson, R. G.	Feb. 12, 1906	Geraid Carden Hudson	Sept. 10, 1303
Hutchins, C. M. Jaccard, F. C.	Oct. 18, 1909		
James, E. W.	March 4, 1907	Alice James	Dec. 31, 1907
Jones, G. R.	Nov. 24, 1910	***************************************	
Keeler, W. I.	Feb. 23, 1909		
Kingsbury, H. A.	Aug. 1, 1908		
Knight, R. F.	Oct. 7, 1908		
Kolatschevsky, A. T.	Nov. 18, 1908	Nicholas A. Kolatschevsky	Feb. 6, 1910
Labbë, A. G.	Nov. 30, 1910		
Lamont, C. R.	June, 1905	Constance	Sept. 1906
		John	May, 1908
	T 10 1007	Benjamin	Sept., 1909
Leavell, J. H.	June 12, 1907	Dorothy Guild Lee	Dec. 15, 1909
Lee, E. G.	Oct. 7, 1908 Nov. 19, 1907	Dorothy Guild Lee	Dec. 10, 1000
Loring, H. D. Luther, G. D.	Sept. 20, 1910		
MacGregor, M. E.	Dec. 17, 1909		
Mansfield, A. P.	Jan., 1911		
McChesney, H. H.	Oct. 12, 1909		
Milne, W. D.	Oct. 1, 1910		
Moller, Kenneth,	June 19, 1907	Elizabeth Sweetser Moller	Aug. 19, 1908
		Susan Anderson Moller	Jan, 12, 1910
Moody, H. L.	Nov. 4, 1907		
Murfey, G. A.	Aug. 10, 1909	D. H. H. E. N. I. I.	T 07 1011
Nichols, Bryant,	Sept. 14, 1909	Bartlett Fogg Nichols	Jan. 27, 1911
Nichols, P. R.	June 20, 1907		
Packard, E. H.	June 27, 1908 Date not known		
Packwood, Miss L. P. C.	March 19, 1910		
Parlin, R. W. Pope, Allen	June 10, 1908	Thomas Allen Pope	April 10, 1909
Rockwell, S. E.	Jan. 25, 1911	I Hollas I Holl I opo	11p111 10, 1000
Russ, D. E.	June 30, 1909	Marion Walton Russ	March, 1910
Sanders, R. B.	Sept. 18, 1907		
Smith, T. L.	June 18, 1907		
Soule, Winsor	Oct. 19, 1907		
Squire, E. H.	Jan. 26, 1910		
Starkweather, O. H.	Sept. 18, 1907	Oscar Allen Starkweather	June 30, 1908
	37 40 1000	Ruth Elizabeth Starkweather	Nov. 1, 1910
Sullwold, H. A.	Nov. 16, 1908	Gretchen Sullwold	Aug. 7, 1909
m 1 7 77	Comt 10 1010	John Sullwold	Feb. 14, 1911
Taylor, J. H.	Sept. 12, 1910 Date not known		
Thacher, S. P.	Sept. 1, 1910		
Thayer, R. E.	Dec. 28, 1910		
Thomas, J. J. Udale, S. M.	Date not known		
Van der Stucken, F. R.	June, 2, 1909		
Vose, C. A.	Jan. 8, 1908	Carol Vose	Jan. 1, 1909
Vose, C. A. Waldo, W. G.	June 27, 1911		
Walker, P. B.	Jan. 26, 1910		
Wiggin, A. E.	Sept. 18, 1909	Lyman Albert Wiggin	July 18, 1910
Willcomb, R. H.	May 4, 1911	William I. Wiles	M 1 OF 1011
Wilson, E. C.	Dec. 31, 1908	Hildegarde Wilson	March 25, 1911
Wing, E. H.	Nov. 11, 1908	Barbara Mead Wires	April 2 1010
Wires, E. S.	June 22, 1909	Darbara Mead wires	April 2, 1910

A total of eighty three married men of our 300 on the mailing list, or 27.7%. There are thirty five sons and daughters of '07.

# IV. Pithy Personal Pointers

Bob Albro is with the W. H. McElwain Company, Nashua, N. H. His engagement to Miss Jean A. Oliphant of Springfield, Mass., was

announced on April 1.—Lawrence Allen's address is now 133 Newtonville Avenue, Newton, Mass. He was promoted to be sales manager of one of the selling departments of the W. H. McElwain Company this spring.—The engagement is announced of F. W. Bachmann.—F. E. Banfield, Jr., 17 Woodward Street, Newton Highlands, Mass.—Jim Barker has left his position with the Canadian Pacific R. R., but the secretary does not know where he is now located. Mail should be addressed to him at 20 Oxford Street, Pittsfield, Mass.—Oric Bates, son of Professor Bates, who was connected with '07 in our freshman year, has recently returned from Egypt, where he has made interesting explorations.—Rutherford Bingham is in South America. Mail will reach him if addressed to him at St. Nicholas Club, New York City.—J. C. Bradley is in Kenosha, Wis.—The long study of E. L. Chaffee at Harvard has been rewarded in fitting style. He has won a \$200 Bowdoin prize at Harvard for the research which he has been doing during the year.

The work was on the study of a new method of impact excitation of undamped electrical oscillations, which method has turned out to be by far the best method for use in wireless telephony.

He also received a doctor's degree in physics at Harvard, and has been given a \$575 fellowship for research next year, including his appointment as an instructor in electrical engineering and physics. Hearty congratulations!—Ralph Crosby is living at 39 Chute Street, Reading, Mass.—J. A. Davis is now in the Bureau of Mines, Washington, D. C. In June he was making an investigation of methods of mine tunneling in Denver, Col.—"Tom" Gould, 102 Webster Street, Manchester, N. H.—Lieut. S. C. Godfrey, U. S. A., Washington Barracks, D. C.—E. Sykes Goodwin, 42 Westminster Street, Providence, R. I.—B. C. Gupta writes as follows:

I have charge of a 3000 K. W., 60,000-volt, three phase substation—two electrical filatures, consisting of three three-phase, 2300-volt transformers and 1500 basin electric heaters in one of the largest silk mills in the world; also of eighteen miles of high tension transmission and telephone lines. I have been allowed plenty of leeway to carry on experimental work, and have invented and constructed the following: (1) electrical method of killing silk cocoon, (2) electric raw silk press, (3) electric coil winding machine for heaters, (4) electric boiler, (5) electric silk rewinding machine, (6) a very cheap electric heater (cost only 65c.), (7) electric silk thread guiding mechanism, and one or two smaller things.

Gupta is in Srinagar, Kashmere, India.—R. N. Hall, 409 West Elm Street, Brockton, Mass.—Hud Hastings writes:

There were about eighty at the informal dinner of the Northwestern Association the same night as the big banquet in Boston, and '07 was the best represented class with eight men present.

Good for the Chicago '07 boys!—T. C. Keeling writes:

I haven't seen an '07 man since leaving Boston for Ponce, Porto Rico, in May, 1908. Last July I came over to Cuba and am now located in San Antonio de los Baños, where T. G. Webber, '07, and I are in charge of Lake Ariguanabo Company, which supplies water and electric lighting service to the city. He and I are the only two Americans in town, but we are only twenty-two miles out of Havana and get in occasionally to see the metropolis, which, by the way, is very decidedly worth seeing.

—E. F. Lewis finished his scholarship in architecture at the American Academy in Rome on February 1, 1911. Since then he has been traveling around France with headquarters in Paris. He expects to be back in America this summer. Address, 148 Holden Street, Providence, R. I.—A. P. Mansfield, Wakefield, Mass.—Howard Marvin, 72 Mall Street, Lynn, Mass.—W. S. Moore, 261 West Newton Street, Boston, Mass.—Fred W. Morrill wrote in March, 1911:

Still in Tien-tsin teaching bridges and bridge design. I like it better and better but am coming home in July to see if I have forgotten how to carry a suit-case and chase my own tennis balls. Took a thirty-days' trip on horseback to Mongolia and Northern Shansi last summer. We had an interpreter who didn't speak any English. His function was to explain our Chinese to Mongols and also to Chinese.

-E. H. Packard is now living at 521/2 South Goodman Street, Rochester, N. Y.-R. W. Parlin has charge of the engineering for the Washington County Water Company, Hagerstown, Md. He and Mrs. Parlin (Miss Darling, '07) may be addressed here.-W. P. Ravner. 4518 Baltimore Avenue, Philadelphia, Pa.—H. D. Reed is working for the New England Telephone and Telegraph Company. He became engaged a few months ago to Miss Helen D. Church of St. John, N. B.-John Rehn is in Hidalgo, N. L., Mexico.-G. H. Rodd, 108 2d Street, Portland, Ore.-A. F. Stevenson is now manager and bacteriologist for the New York Dairy Demonstration Company. They have a creamery and ship absolutely clean, pure milk to New York, where it is sold by the committee on infant mortality of the New York Milk Committee to the poor people for infant feeding.—Phelps Swett is engaged to Miss Eleanor MacAdam of West Medford, Mass., and expects to be married in the fall.—C. J. Trauerman is now at Tuscarora, Nev. -W. G. Waldo is now at 581 Woodward Avenue, Detroit, Mich. —E. F. Whitney writes from Seattle, Wash. He is secretary of the Seattle section of the American Institute of Electrical Engineers. He says that O. W. Potter, '07, is working with the Milwaukee and Puget Sound R. R.—L. C. Whittemore, 236 Main Street, Poughkeepsie, N. Y.-H. S. Wilkins, Wallingford, Vt.—E. C. Wilson is running a general engineering office in Waterville, Me. He with Alvord and Lee represent '07 in the Maine Society of Civil Engineers.

## 1908.

JOHN T. TOBIN, Sec., care F. F. Harrington, Bridge Engineer, Virginian Railway Company, Norfolk, Va. RUDOLPH B. WEILER, Res. Sec., care of Sharples Separator Com-

pany, West Chester, Pa.

# I. On the Part of the Resident Secretary

As it was discovered at the last moment that the Technology Club could not be secured for the May 9 dinner, after all arrangements had been made, the dinner was held at the Boston City Club instead. The following were present: Lawrence H. Allen, A. B. Appleton, C. H. Boylston, W. E. Barton, R. J. Batchelder, F. A. Cole, A. M. Cook, C. W. Clark, R. W. Cushing, "Nick" Carter, L. B. Ellis, W. D. Ford, H. P. Gurney, Sherwood Hall, Jr., P. H. Heimer, A. W. Heath, "Doc" Leslie, O. S. Lyon, C. W. Morrison, E. J. Scott, E. R. Smith, C. W. Whitmore, and "Pop" Gerrish, who presided,—twenty-three in all. It was decided that all future bi-monthly dinners be held at the Boston City Club, at one dollar per plate, instead of at the Technology Club as heretofore. Please note! It was decided to omit the regular July dinner and instead to make a trip to Nantasket. H. T. Gerrish, 247 Atlantic Avenue, Boston, and Leslie Ellis, care Metropolitan Water Works, 1 Ashburton Place, Boston, were elected a committee to make the necessary arrangements. On recommendation of the resident secretary, the following motion was passed: "That the resident secretary be instructed to refund to the class representative on the Alumni Council any necessary expense said representative incurs for dinners at meetings of the council, after this date (May 9, 1911) for a period of ten years from date." Up to this time, in order to represent us at the Council meetings, it has been necessary for our representative to personally defray the expense of the dinner which always accompanies the meeting. Hereafter the class will justly bear the burden.—The sum of twenty dollars was voted as a contribution toward the support of the crew. The term of office of our representative on the Council will expire this year. An election will take place at the September meeting to fill this vacancy.—Owing to a mistake on the part of the printer, the death of Warren Stearns Baker, '08, was chronicled under 1907 news in the last issue, instead of in our own column.—Leo Loeb has an article on the "Purchase of Coal by Specification" in the March number of the Engineering Magazine. This was first presented as a paper before the Society of Engineers of Eastern New York in November, 1910. Another article of his dealing with the refinements of methods of making analyses for payment on the B. T. U. basis, appeared in a recent number of the Journal of Industrial and Engineering Chemistry.—That the New York contingent is getting up to speed under the able direction of Harold S. Osborne (care American Tel. & Tel. Co., 15 Dey St., New York), is shown by the following letter which we received from him under date of March 27. No doubt some of the fellows visiting New York can arrange their trips to take in these dinners. They can be sure of an enthusiastic welcome by the "regulars."

After a little discussion down at the club, we finally resolved to have a 1908 class dinner here in New York. The great event was entitled in the notices "The First Reunion Dinner of the Class of 1908 in New York," and took place Saturday evening, March 25, 1911. We sent out notices to about thirty-five '08 men in and near the city, and managed to collect a pretty fair representation: E. J. Riley, W. H. Mason, A. B. Babcock, R. S. Crane, H. D. Bonnetheau, W. H. Toppan, A. F. Edge, C. H. Preston, A. E. Bremer, W. H. Medlicott, H. L. Burgess, O. A. Iasigi, F. J. Friedman, H. S. Osborne—fourteen in all. Strangely enough, Bremer was the only man in the crowd who was married, or who would admit it, so of course, he was enthusiastically toasted. None of the other fellows would even confess that they are engaged. I suppose that we are to conclude that the twenty-one fellows who didn't come to the dinner are all either engaged or married, and that that is why they didn't appear.

You may be sure that we had a jolly time, for Iasigi acted as Lord High Mixer of Cocktails, and Bonnetheau filled the place of Master of Informalities. After a good dinner had loosened everyone's tongue, we sat the evening out around the table, telling all we could about the actions of the other fellows, and all we cared to about our own behavior during the last two years and a half. One feature of the evening was a very interesting discourse by Bonnetheau on "Architects and Architecture I Have Known," another was the story told by Toppan and Babcock of their experiences in Philadelphia. All in all it was so enjoyable an evening that we agreed to take dinner together informally at the club the last Saturday of every month. We shall be glad if you will have a note of that published in the Review, so that all the 1908 men around New York may know of it.

## II. Matrimonial

The engagement is announced of Harold H. Howland to Miss Etta E. Mason of Lowell, Mass.—Rudolph B. Weiler was married June 6, 1911, to Miss Emily A. Gilchrist of Brighton, Mass.

Here follows a table as complete as we were able to make it from our records of all the fellows married to date, with children, if any. We realize that it is probably very incomplete, and would be glad to receive corrections as well as additions. Your resident secretary has even added his own name to the list. No account has been taken of the fellows who reported "married to my job." Judging by the number who reported "not yet but soon" the list will be due for some increase, in some cases, in all four columns.

The marriage announcement of Arthur E. Skillings to Miss Eva B. Pillow of Allston, Mass., on April 12, has been received.

—George M. Belcher's engagement was announced April 17, through the Boston Transcript, to Miss Edith W. Bryant of Cliftondale, Mass. Miss Bryant is a graduate of Wellesley College.

Name	Married	Children	Born
Adams, W. A. Allen, Horace E. Ambrose, Chas. B. Amory, Robt. Angus, R. A. Anthony, R. B.	Date unknown June 1, 1910 June 18, 1910 Sept. 20, 1910 Nov., 1909 Oct. 12, 1910		
Anthony, R. B. Bailey, G. Wm. Barton, W. E. Batsford, Howard E. Bonillas, Ignacio	July 1, 1908 Nov., 1909 Aug. 10, 1910 Dec. 18, 1909	Sherburne Byron Bailey Daughter	Dec. 2, 1909 Sept., 1910
Bremer, Arthur Edmund Brown, Philip C. Bullard, Benjamin Bullard, M. L. Callaway, H. Ross Caryl, R. C. Christensen, Arthur O.	June 1, 1909 March 31, 1910 March 24, 1910 Oct. 3, 1910 Sept. 26, 1910 Jan. 25, 1911	Mary Phyllis Brown	July 20, 1910
Clapp, Chalmers S. Cochrane, Clifford H. Daddow, S. H.	May, 1910 Nov., 1909 Feb. 3, 1909*	Richard Maurice Cochrane	Sept. 27, 1910
Daddow, S. H. Dana, Allston, Davidson, S. Lock Dolke, Jr., W. Fred Drake, R. E. Dwight, Jr., J. F. Eames, Herbert S. Elton, H. C.	June 11, 1908 June 9, 1909 Nov. 21, 1910 March 20, 1911 April 26, 1909 July 22, 1910 Sept. 5, 1909**	Dorothy Dana	Nov. 8, 1909
Ferry, Lewis K.	Jan., 1909 Nov. 24, 1908***	Son	Date unknown
Freethy, Geo. E. Gardner, Arthur L. Glover, Geo. T. Hall, Carl A. Hall, Edwin R.	Date unknown Oct. 27, 1909 April 6, 1910 Sept. 13, 1910 July 6, 1910 Dec. 26, 1910	Laurence Ripley Gardner	Dec. 3, 1910
Handy, Percy L. Hastings, Arthur H. Hedge, Lafayette B. Hoole, Henry Wm.	June 23, 1906 Jan. 18, 1909 Feb. 20, 1906	Ben Gaston Hastings Harriett Hastings Lafayette Boyd Hedge, Jr. Henry Wm. Hoole, Jr. Robt. Royal Hoole	Sept. 8, 1907 Oct. 12, 1909 Dec. 15, 1910 Dec. 20, 1906 May 5, 1911
Kedy, Stiles F. Kenniston, C. W. Kinsman, C. C. Packwood, Miss L. P. C. Parlin, R. W.	Oct. 20, 1909 April 8, 1910 Feb. 27, 1900 Date unknown March 19, 1910	George C. Kinsman	Feb. 7, 1902
Penny, Alee N. Pierre, Geo. H. Porosky, Matthew Reid, J. G. Remon, J. A. Ripley, Read I. Sampson, Miles Sando, J. B.	May 21, 1910 Dec. 25, 1908 Jan. 10, 1911 Dec. 27, 1910 Sept. 1910 Oct. 4, 1910 Nov. 9, 1910 Date unknown	Dorothy Buths Penny Stanley Holt Pierce	March 17, 1911 Nov. 25, 1910
Schirmer, Rens E. Scott, Edward J. Smith, E. R.	July 27, 1909 Dec. 4, 1909 June 13, 1909	Edward Parker Schirmer	July 4, 1910
Sutton, L. H. Talbot, Jas. M. Thompson, Abbot H. Thurlow, L. W. True, H. E. Warren, Edward Leon Weeks, Arthur T. Whitmore, C. W. Weiler, Rudolph B. Youngerman, Conrad	Aug. 20, 1910 Oct. 28, 1909 Oct. 26, 1910 Date unknown Nov. 15, 1910 April 26, 1910 Jan. 3, 1910 Sept. 28, 1910 June 6, 1911 June 15, 1910	John DeGroff Talbot	Jan. 1, 1911

\*Mrs. S. H. Daddow died Jan. 1, 1910. \*\*Mrs. H. C. Elton died May, 1910. \*\*\*Mrs. Lewis K. Ferry died June, 1910

# III. Report of the Condition of the Treasury

The treasurer's report for the year ending June 1 follows. A comparison with that of last year shows a larger balance, and

also much larger expenditures. The latter is due, first, to the fact that by vote of the annual meeting of 1910, printed return card notices of all bi-monthly meetings were sent out to residents of Boston and vicinity, and secondly, to the fact that this year the resident secretary had the class register carefully compared with that in the alumni office to correct any errors that may have crept into either. The receipts for dues this year were \$10.75 less than last year. This means that you have probably neglected to settle up for this year. Right? We thought so. Then mail it in at once. The loss on the annual dinner was caused by the failure of several who had promised to come, to show up. Twenty-six favorable replies were received, so we felt safe in guaranteeing twenty-three. Only twenty appeared. Moral: If you say you are coming, and later find that you can't, let us know about it.

#### TREASURER'S REPORT, YEAR ENDING JUNE 1, 1911

Receipts		
Balance on hand June 1,1910	\$136.52	
Dues received	147.55	
Received for 20 dinners at \$1.50, March 14	30.00	
		\$314.07

#### Expenses

Paid to Alumni Association for printing, typewriting,	postage,
office expense, etc.	\$61.77
Postage (Additional)	6.19
Typewriting (Additional)	1.49
Printing annual letter	11.80
Flowers, per vote of annual meeting	3.00
Paid for 23 dinners at \$1.50, March 14	34.50
Collection charges by bank	1.70
Miscellaneous	1.09
Balance	192.53
	\$314.07

## IV. Results of Salary Canvass

The total number of replies received on the salary canvass was 146. Of these 106 were on the graduate list and forty on the non-graduate. Two of the former were not counted, as one bore the word "Independent" and the other stated "In business for myself with varying income." Three of the non-graduate cards were omitted. One was endorsed "Quantum Sufficit," another stated "Still a student at the Institute" and the last "No salary at present owing to peculiar conditions." The net result, then, is 104 graduate cards and thirty-seven non-graduate, which is an increase of twenty over last year. The average salary of the 104 graduate members was \$1,418.38 and total amount earned by them was \$147,512. The average salary of the thirty-seven non-graduate members was \$1,664.81 and the total amount

earned by them was \$61,598. The total amount earned by all members reported was \$209,110 making an average of \$1,483.05. The gains over last year on the averages are \$266 for the graduates, \$254 for the non-graduates and \$270 for both together. The lowest reported by a graduate was \$540 and expenses, and the lowest by a non-graduate, omitting the one who reported none at all, was \$720. In this tabulation no expenses were figured, nor Christmas presents, nor interest in the business. The highest salary reported by a graduate was \$4,000 and by a non-graduate \$4,680. The latter was by a man in business for himself and is stated to be the amount cleared in one year. The middle man on the graduate list received \$1,300 and in the non-graduate list \$1,500. The graduate list is made up of all men who ever were connected with the class of 1908 who hold a degree from the Institute, whether given in '08 or not, and whose names have not been removed. On the graduate list fifty-six men received less than the average and forty-eight men more. On the nongraduate list twenty-two men received less than the average and fifteen men more. For the two lists taken together eighty received less than the average and sixty-one more.

#### ANALYSIS OF SALARIES, CLASS OF 1908

					Graduate	Non-graduate	Total
Below \$750					3	1	4
\$750 to \$899					4	1	5
900 to 999					8	2	10
1,000 to 1,099					12	7	19
1,100 to 1,199					0	1	1
1,200 to 1,299					18	2	20
1,300 to 1,399					9	2	11
1,400 to 1,499					4	2	6
1,500 to 1,599					19	4	23
1,600 to 1,799					4	3	7
1,800 to 1,999					9	5	14
2,000 to 2,199			- 2		7	0	7
2,200 to 2,399					1	2	3
2,400 and ove	r .				6	5	11
						_	_
Total .					104	37	141

## IV. New Addresses

Monroe Ames, 926 Calle Echeverria, Belgrano, Buenos Aires, Argentina.—Robert Amory, 31 Massachusetts Avenue, Boston, Mass.—R. B. Anthony, The Bristol Company, 1670 Frick Building Annex, Pittsburg, Pa.—A. B. Babcock, American Sugar Refining Company, Brooklyn, N. Y.—G. William Bailey, Dan O'Connell & Sons, contractors, Holyoke, Mass.—Charles L. Batchelder, Transitman, City Engineer's Office, Lowell, Mass.—R. E. Beck, 127 Cornell Street, Newton Lower Falls, Mass.—E. J. Beede, 139 Lincoln Street, Boston, Mass.—F. M. Bond, Forest Products

Laboratory, Madison, Wis.—Donald Bowman, Engineering Department, Commonwealth Edison Company, 28 North Market Street, Chicago, Ill.-A. E. Bremer, 921 Washington Street, Hoboken, N. J.—A. O. Christensen, Sombrerete, Zac, Mexico.— Chalmers S. Clapp, Room 622, Berkeley Building, 420 Boylston Street, Boston, Mass.—George A. Clatur, City Engineer's Office, Pawtucket, R. I.—Frederick G. Coburn, U. S. Navy Yard, Philadelphia, Pa.—Frederick A. Cole, Moore & Co., 12 Pemberton Square, Boston, Mass.—LeSeur T. Collins, 53 State Street, Boston, Mass.-Hugh Correll, 322 East 25th Street, Tacoma, Wash.—John S. Coye, 295 Shasta Avenue, Oakland, Cal.—M. E. Denny, Leven Shipyard, Dunbarton, Scotland.—Arthur S. Douglass, 164 Harvard Avenue, Brookline, Mass.—Gregory M. Dexter, Engineering Department, Oregon Short Line R. R., Salt Lake City, Utah.—R. E. Drake, 24 Trinity Place, Boston, Mass.— Leslie B. Ellis, Metropolitan Water Works, Ashburton Place. Boston, Mass.—Charles G. Ewing, 822 Security Building, St. Louis. Mo.—Paul E. Fernald, P. O. Box 397, Tuscon, Ariz.—Hubert W. Flaherty, 101 Tremont Street, Boston, Mass.-W. D. Ford, Blake & Knowles Pump Co., East Cambridge, Mass.-V. M. Frey, G. E. Baker Company, York, Pa.—F. J. Friedman, 50 East 20th Street, New York, N. Y.—J. C. Gaylord, Instructor in Electrical Engineering, University of Southern California, Los Angeles, Cal.—Charles A. Gibbons, Jr., Jacala, Hgo., Mexico. -Gordon M. Gilkison, Telluride Power Co., Provo, Utah., -William B. Given, Jr., Secretary to the President, American Brake Shoe and Foundry Company, 20 Clinton Street, New York, N. Y.—George T. Glover, Westinghouse Electric & Machine Co., New England Building, Cleveland, Ohio.-H. W. Griswold, U. S. Engineer Office, Tuscaloosa, Ala.—Harold P. Gurney, North American Rubber Company, Hyde Park, Mass. -Joseph W. L. Hale, Head Instructor, P. R. R. School for Apprentices, 1120 & 13th Ave., Altoona, Pa.—James E. Hale, Goodyear Tire & Rubber Company, Akron, Ohio.-M. LeRoy Hammond, 30 Walker Street, Newtonville, Mass.-A. W. Heath, Cameron Car Company, Beverly, Mass.—Ben Hershey, 1026 Henry Building, Seattle, Wash.-P. H. Heimer, 498 Norfolk Street, Mattapan, Mass.—C. E. Hollender, Purchasing Agent, Northern Texas Traction Company, Fort Worth, Tex.—Henry W. Hoole, Chicago Manager, Miller, Franklin & Stevenson, Business Economists, 435 First National Bank Building, Chicago, Ill.—H. H. Howland, Westdale, Mass.—W. W. Karnan, 1818 Wright Building, St. Louis, Mo.—Stiles F. Kedy Minetto-Meridan Company, Minetto, N. Y.-Richard Y. Kennard, 98 Main Street, Winsted, Conn.—W. C. Kerr, Catonsville, Md.—Warner H. Kiefaber, 20 Bellevue Avenue, Dayton, Ohio.—C. C. Kinsman, T. H. Symington Company, 623 Peoples Gas Building, Chicago, Ill.—B. S. Leslie has been transferred from the Chicago office of the United Shoe Machinery Company to their Boston offices in the Albany Building.—Howard B. Luther, Lukas Str., Dresden, Germany.—John H. Locke, Westinghouse Lamp Company, 514 West 23rd Street, New York, N. Y.—G. M. J. MacKay, Research Laboratory, General Electric Company, Schenectady, N. Y.—Leo Loeb, Renssalaer Polytechnic Institute, Troy, N. Y.-William H. Mason, care Marcus Mason & Company, 17 Battery Place, New York, N. Y.-Lincoln Mayo, 11 Robeson Street, Jamaica Plain, Mass.-C. W. Morrison, Associated Factory Mutual Fire Insurance Company, 31 Milk Street, Boston, Mass.—W. H. Medlicott, London Assurance Corporation, 84 William Street, New York, N. Y.—Everett H. Newhall, 238 Summer Street, Lynn, Mass.—Alec N. Penny, Ray Consolidated Copper Company, Ray, Ariz.—E. A. Plumer, American Telephone & Telegraph Company, 15 Dey Street, New York, N. Y.—Read I. Ripley, 348 Congress Street, Boston, Mass.-Miles Sampson, American Machine Company, Pawtucket, R. I.—Robert A. Schmucker, Red Hook, N. Y.—Edward J. Scott, 50 Congress Street, Boston, Mass.—H. R. Sewell, Allis-Chalmers 801 Wilson Building, Dallas, Tex.-Allen Seymour, Provident Building, Tacoma, Wash.—Frank W. Sharman, care Olmstead Brothers, Brookline, Mass.—Carroll D. Steele, 1226 East 1st Street, Duluth, Minn.—Lloyd H. Sutton, Ass't Examiner of Patents, Patent Office, Washington, D. C.-L. W. Thurlow, Great Western Sugar Company, Fort Collins, Col.—Channing Turner, care Sears & Smith, 516 Howard Building, Providence, R. I.-E. A. Turner, care Northwestern Expanded Metal Co., Old Colony Building, Chicago, Ill.—Leland E. Wemple, Hoyt Metal Company, Granite City, Ill.-Mason T. Whiting, care Charles T. Main, 201 Devonshire Street, Boston, Mass.—Arthur C. Winch, Saxonville, Mass.—Lester S. Weeks, General Superintendent, Ponce Railway & Light Company, Ponce, Porto Rico.-George D. Whittle, office of the Chief Engineer of Construction, P. & N. T. Ry., Amarillo, Tex.—Edgar I. Williams, American Academy, 66 Via Nomentana, Rome, Italy.-Rufus W. G. Wint, care F. W. Wint Company, Ltd., Catasauqua, Lehigh County, Pa. A. C. Nichols has returned from the Philippines, and his address is now 130 Pearson Road, Brookline.-Richard Collins, care W. H. McElwain Co., Manchester, N. H.

Your resident secretary met J. A. Remon, whom he had not seen for four years, recently in Philadelphia. His business address is care American Telephone & Telegraph Co., 764 The Bourse, Philadelphia, Pa., and his home address is 1629 So. Ithan Street. A large number of fellows came to town for the Congress of Technology, and the class was well represented at both the smoker and the banquet.—At the Pops on June 6 the following were present: L. H. Allen, R. J. Batchelder, who had just returned from Italy, traveling on the M. I. T. Scholarship, E. J.

Beebe, C. W. Clark, G. S. Clatur, Langdon Coffin, F. A. Cole, Richard Collins, A. M. Cook, Hardy Cross, R. W. Cushing, L. B. Ellis, S. Ellis, "Hobe" Ferris, who was in town for a few days from Akron, O., W. D. Ford, A. W. Heath, Sherwood Hall, Jr., C. F. Joy, Jr., Rinker Kibbey, "Doc" Leslie, A. C. Nichols, who had just returned from the Philippines, E. J. Orchard, Joe Pope, C. B. Putnam and "Pop" Gerrish.

## V. Letters

E. A. Turner, '08, sends us the following from Chicago on the letter head of the North Western Expanded Metal Co., Old Colony Building., under date of April 3. Here's a good chance for the Chicago bunch to get acquainted:

It is nearly four years since I left old Boston town, and, unfortunately, I have never been able to get back there to see the old place. But I intend to some day before it goes "dry" (he has plenty of time—En.) and I will try to make up for what I have missed. I have often wondered whether it is much fun being a resident secretary, trying to keep in touch with a lot of fellows who have scattered to the four corners of the globe, and, incidentally trying to collect that "measley plunk" for class dues. Your letters have reached me wherever I have been,—and I have been some. Please note the above address and don't try to reach me through every job I've held in the last four years, because when that letter reaches me it has been forwarded so many times that I have to pay excess postage on account of the weight of the ink used in keeping it going. Well, I have finally quit railroading after getting as far as holding down a roundhouse foreman's job. Twelve hours night work every night in the week is no fun and is also dirty. I found my vocabulary of profane language steadily increasing, but when it came to salary, it increased but slowly, and not in ratio with the responsibilities. I am holding down a job as assistant superintendent with the above company now and have a much better place, prospects and salary.

I have only been here in Chicago about three months and it has begun to look like a permanent thing and so I would appreciate it very much if you would give me the names of any of my former classmates who are located here so I can look

them up.

Matthew C. Hayes, P. O. Box 3, Niagara Falls, N. Y., writes us under date of March 25, 1911, as follows:

If you know of any Technology men, and especially any of the members of our class, who expect to visit the Falls either on their "honeymoon" or for the more sordid purpose of business, please let them know that I am here on the lookout for them. Aside from the pleasure it would give me to see them, I might be able to reciprocate by showing them a few of the sights, as I am at present the assistant to the engineer-in-charge of the Ontario Power Company. Our capacity is now 120,000 h. p. and some of our current is sent out at 110,000 volts.

Our faithful South American member, "Bunny" Ames, 926 Calle Echeverria, Belgrano, Buenos Aires, has sent us the following letter with some photographs, with descriptions of the work and country, which the resident secretary will be glad to lend to any of the fellows interested:

I had hoped to be home this summer but have now decided to wait till 1912, when I shall be home about May 1, if all goes well. Life in these foreign countries

is not so wildly exciting as some folks at home seem to think, not at any rate unless you have plenty of leisure. When one works six and a half days a week there is not much time left for seeking adventures. The railroad here is getting on slowly toward completion. We hoped to finish the river wall last month but a series of storms in the months of December, January and February destroyed a lot of the coffer dam and now we shall not finish till April. One of these storms was a corker. The waves came so high that they were breaking right over the wall, which is 4.47 meters above mean low water and my box car that I live in was on a new bank within a meter of the edge. It didn't look good enough for yours truly so I left my happy home and went down to the office to sleep. The car was still standing next morning although it had a dangerous list towards the river. About one hundred meters further along though there were whole stretches of the track tipped up with one rail directly over the other, due to the earth being washed out from underneath. Of course, there is a parapet to be built later on which will protect our definite track from anything of this sort.

# We have the following from Lewis K. Ferry, Paseo 27, Vedado, Havana, Cuba, under date of March 25, 1911:

I have been in Havana since February 1 and am teaching in the Cathedral school in Vedado. We have forty boys in the department I am in. Nearly half of them are Americans or of some other nationality than Cuban, but all speak Spanish. What Spanish I studied at Tech did not help me much in understanding or speaking with the Cubans, although I could read the newspapers with little difficulty. All of my classes are in English, but inasmuch as some of my Cuban boys understand and speak little or no English, I simply had to learn their language. If the next two months bring as much improvement as the last two, I shall not be afraid to go anywhere in Cuba by the time school closes. I expect to stay here for another year at least, and think I shall be very sorry to leave for I am very much in love with the Cuban climate. I have seen a number of aeroplanes in the sky, those the past week flying directly over Vedado on their way around Morro Castle and within sight and hearing of the school here. The carnival through the past month has interested me much. From what I hear, it is much like "Mardi Gras" in New Orleans. Sunday afternoon and evening for four weeks are the gayest times, though Mondays and Tuesdays there is something going on. In Havana there is a very wide street with a beautiful park in the center of it extending from the water opposite Morro for something like half a mile or more. I think it puts Commonwealth Avenue in the shade. The carnival parade is round and round this park and a driveway for a mile along the breakwater. Hundreds of carriages and many autos take part. Some of the people are in masquerade costume. Everyone has confetti and "serpentinas,"—multi-colored paper ribbon, so that at the end of two or three hours the "Prado" is pretty well covered with gay streamers caught on trees, houses and carriages. Children go about the street dressed in costume and usually masked. They are up to all sorts of pranks but are very well behaved. Sometimes there are musicians in the crowd and then you soon realize you are not in America. Cement is king here all right. Houses are built of brick or stone, and covered with cement or plaster and painted. Walks are made of cement and it is hard to find a place where some has not been used. Havana is a very clean city and far more orderly than any place I have ever been in before. "Cops" naturally are in evidence everywhere, but I have not seen any of them have to do much yet. Politeness is a rather necessary virtue here, and many Americans could do well to follow the example set by these warmblooded people. I presume you would appreciate a little breath of the sweet, warm, caressing Cuban climate, but I am afraid the frost will nip it before it reaches Boston.

#### 1909.

CARL W. GRAM, Sec., care Walter Baker Co., Ltd., Milton, Mass. Maurice R. Scharff, Res. Sec., Mass. Inst. of Tech., Boston, Mass.

## T.

As the secretary has returned to Boston, and appears likely to stay for awhile, the resident secretary feels that he has outlived his official usefulness, and retires herewith with a sigh of relief. It may be noted that the present notes are written by the secretary and resident secretary in collaboration. The class has had two reunions since the last news appeared, and both were voted successful. On April 10 a dinner was held at the Hotel Plaza in preparation for the Technology Congress smoker. Forty-six were present, and all succeeded in getting well prepared for the jollifiration that followed in Symphony Hall. Among those present were Ayres, Loomis, Haynes, Gram, Dawes, May, Clifford, Nisbet, Nickerson, Shaw, W. H. Jones, Main, Curley, Riefkohl, Fisher, Spencer, R. L. Jones, Rew, Hooper, Hamilton, Jacobs, Pope, Dow, W. W. King, Pepper, Godfrey, Boardman, Belcher, Scharff, Inglee, Martin, Emerson, F. G. Perry, L. D. Chapman, A. F. Jackson, Durgin, Jenness, Cole and Gibbs. Everybody took part in all the events of the Technology Congress, and had a wonderful time. On the night of the Pops a dinner was held to which ladies were invited. Those present with their ladies were: Nisbet, C. E. Foster, B. A. Robinson, Rew, E. A. Adams, Thornley, Scharff and Gram. Nisbet and Thornley deserve special mention, coming up from Providence with their fiancées; and "Smut" especially distinguished himself by also bringing one of our co-eds, Miss Pearson. Quite a bunch of '09 men showed up at the Pops, W. H. Jones, R. L. Jones, Martin, Dow, Gilbert, C. E. Foster, Thornley, E. Q. Adams, O. J. Crommett, Christie, Fellows, Haynes, Rew. Wells, A. F. Jackson, J. W. Parker, Gram, C. D. Jacobs, Pepper, R. W. Keeney, Nisbet, Dan Belcher, L. C. Shaw and Emerson. We were all glad to see Bob Keeney, who has been at the Colorado School of Mines. Here is an extract from a letter received from him before he came east:

Next year I return here as instructor in metallurgy. I have recently been fortunate enough to be awarded the Carnegie Research Scholarship of \$500 by the Iron and Steel Institute of Great Britain with which to continue the research begun in my thesis of last year on the "Production of Steels and Ferro-alloys directly from Ores in the Electric Furnace. The work is to be done here in a furnace designed recently by me before I received the award.

—Another of the fellows who deserves our congratulations is R. L. Jones, who has just received at the Institute the degree of doctor of engineering. Henceforth Dr. Reginald Lamont Jones.

The News, Tacoma, Wash., states that William F. Jones, consulting geologist, may be hired to conduct the survey of valuable coal lands in that vicinity, about which there is much vigorous protest in connection with taxing coal areas in their present undeveloped state. Jones has already made some valuable maps of the land lying between Fairfax and Wilkeson.—Wedding cards have been received from Grenville T. Bridgman who was married to Miss Anita Mailliard on June 3 at La Quinta, Belvedere, Cal. Mr. Bridgman has taken a position with American Zinc, Lead, and Smelting Company in Tennessee.—We quote the following paragraph from the Washington Star, about Miss Helen M. Longyear, who was married on March 25 to Assistant Civil Engineer Carroll Paul, U. S. N.

The charming bride was a brilliant student at the Massachusetts Institute of Technology, graduating number five in the class of 1909 and taking the highest honors in her specialty, architecture, being the editor of the Architectural Magazine After graduation, she entered the office of a leading New York architect and landscape gardener, working hard at her profession, and she also became interested in settlement work in the metropolis and spent last summer abroad, studying that question in Italy. But Dan Cupid has finally won her from architecture and the immigrants over to the naval service.

—We take the following from the Engineering Record: "Arthur B. Morrill has resigned from the engineering staff of the sewage experiment station of the sanitary district of Chicago, to accept the position of professor of hydraulic and sanitary engineering at the University of Tien-tsin, in China. Morrill is a graduate in sanitary engineering of the Massachusetts Institute of Technology." -J. N. Stevenson was in Boston the early part of June on his way from Terre Haute to Wolfeboro, N. H., where he and his wife will be in camp for the summer. Steve reports a very pleasant and successful year at Rose Polytechnic Institute where he has been teaching chemistry. Besides teaching he has been working hard to obtain the degree of master of science in chemical engineering which was awarded him this year. He reports that two of his classmates have been in Terre Haute during the year, and that when one does not see a Tech man, much less a class mate, for so long a time, he will be glad to go to the railroad station just to see a familiar face pass by in the car. If you are going to Terre Haute don't forget Steve.

## II.

#### 1909 JR.

## -Lewis H. Johnson writes:

Speaking of anniversaries, the first addition to the class of 1909 after graduation, by name Ralph Edward Johnson, celebrated his first birthday, April 5. He has seven teeth now and can be relied upon to do his best at the "eats." He sends greetings to the class of 1909.

—Harrut is also a father. On March 27, a son was born, who is to be called C. N., Jr.—H. O. Jenkins was married on May 8 to Miss Gem Lee Barker of Palo Alto, Cal.—The engagement has just been announced of Miss Helen E. Mooar of Hyde Park to W. W. Clifford.—Several fellows have come up with their annual class dues, and many of them are those who left during our undergraduate days. There is still a large percentage left, however, whom we know have the dollar, but who have forgotten that we need it. Please send us a check for 1911 and we won't refuse one at this time for 1912.—The class news for the Review is supposed to go to press on the 10th of the month preceding its issue. The secretary mentions this, so that if you have any news, try to get it in by the 10th, so that it won't be ancient history when the class gets it. Get in the habit of dropping us a card occasionally with bits of news and a check regularly for the yearly dues.

#### III.

Herb Stiebel is now with the Sierra Plata Mining Company Villa Esobeda, via Parral, Chihuahua, Mexico, and writes:

Had a chance to come here at the end of last month (March) and flew the coop from Bingham. It took over seven days to go 2,467 miles, but it was new country for me and I enjoyed the trip, especially in Mexico. No news is good news so au revoir.

—In April Fred Green wrote from mobilization camp, Galveston, Texas:

Just received a copy of the Review which has been chasing me around the country I am squatting down here on the border, hoping we'll invade Mexico, so I can get to see Altamirano, Munoz and other old friends from over the line. The weather here is hotter than Harry Clifford used to make it for the martyrs of Course VI. We "hike" about ten or fifteen miles a day. We are organized for service as infantry though of course that's only a side line to our work on the big guns. I went to Fort Monroe, Va., last fall and was there until spring, when we were ordered down here. When the excitement is over, it is probable that I'll go back to New Orleans with the 164th Company, Coast Artillery Corps, to which I'm now attached. My address is Lieut. Fred M. Green, C. A. C., in care of the Adjutant General, War Dept., Washington, D. C. To the charge of marriage I plead "not guilty."

-From George Weinhagen in Milwaukee comes the following item:

The latest news from Milwaukee is that Eugene Luening has started in business for himself, under the name "The General Welding and Manufacturing Co." They cut and weld all metals by the oxyhydric flame. This is a foreign invention, but has been greatly improved upon by them. They also manufacture the machine used in cutting and welding, and although they have been in existence for only about a month, have sold not less than six machines.

Lost. Any information as to the present whereabouts of the following will be welcomed by the secretary: Howard C. Congdon, C. H. Crawford.

Many reply cards of much interest were returned both at the time of the class dinner in April and again in June giving the following information: N. L. Coleman, 202 Union League Bldg., Los Angeles, Cal., says: "There are no 1909 men in this vicinity but there are quite a number of Tech men of many other classes. I am at present in the building material business (factory agent).— J. H. Schakne, 2304 Center Ave., Pittsburg Pa., is doing some original work in mill power engineering, the results of which will soon be published.—Lord Hersey, Bureau of Standards, Washington, D. C., says they are just installing a new 2,300,000 pounds emery testing machine. "I myself at present am working at the other end of the scale and trying to see into how many parts we can split a millionth of an inch."—R. W. Tuthill, Michigan City, Ind.: "I am now running a sand company, a garage and selling autos."—Austin Keables is with John A. Stevens, 14 Hoyt Ave., Lowell, in engineering, with a specialty in power plant work.—Ira Wolfner, Peoria, Ill., writes from Clarendon, Ark., that "it is too long a jump, --- but expect to be east in June."—Geo. C. Connor, 6001 Curtis Ave., Cleveland, O., is "busy with the lamp business, in Nat. Elec. Assoc. Had a bang-up dinner with 25 other Tech men here two weeks ago. Lots of Tech spirit (s)."—J. C. Dort, Box 972, Salt Lake City, Utah, says that "B. Y. Burgher has diphtheria and is in a Baltimore hospital." Hard luck, Burgher, here's hoping for a speedy recovery.-H. H. Marshall writes that he has word from R. Ohunki that he reached Japan six weeks ago.—Harold Shaffer is temporarily with the U.S. Reclamation Service at Sherman House, Boise, Idaho.-E. A. Robinson, 600 West 122, New York City, is looking for a good summer job. "I can analyze air, water and food, run automobiles and preach sermons."-F. L. Robeson, Blacksburg, Va., is instructing in mathematics at Virginia Polytechnical Institute. He says, "Prof. W. H. Rasche of Graphics here is an enthusiastic Tech man."-J. W. Hathaway says that "B. H. Jones, '09, E. A. Plumer, '08, and myself are now in Texas doing engineering work for the American Telegraph Co. headquarters are in New York and all communications should be sent there. Address, 15 Dey St., New York City."-H. H. Bennett expects to be located in Wyoming.—A. E. Shippee is assistant superintendent of the gas department of the Baton Rouge Electrical Company, Baton Rouge, La.—Here is one from Joss, who is in Porcupine, Ont.: "Loring and I have hung out our shingle up here and are trying to keep the wolf from the door. At the same time we are trying to find a possible mine. If we succeed, we shall be back selling blocks of stock to all of you fellows—so don't blow any of your money foolishly i. e. at Charlie's Chapel. etc., and we will make you rich beyond our dreams."-Two cards arrived from Bill Kelly and Jack Elbert. (Our sincere regrets that we can not reproduce the views.) "Jack and I are off for a bummel with a couple of other Americans. We expect to have some fun.

It looks promising for a big evening with Bill in Berlin. Don't form any false ideas (from the picture)."-E. T. Williams writes from the Imperial Maritime Customs, Newchwang, China, that he is spending his time dodging the plague (in the Customs Service). -Tommy Atherton is at work in Paris; Monty Flagg and some other Tech fellows are with him, 53 Rue de Seina, Paris.-C. W. Gammons, West Newton, Mass., writes, "I spent a short time in Porto Rico for Stone & Webster, but was forced to return because of failure of health. I have not yet returned to work, but expect to do so shortly."—J. R. Baldwin, Box 539, Schenectady, N. Y., is in the testing department of the General Electric Company .-R. L. Cary, 23 Madison St., Princeton, N. J., says, "I am still teaching math, Pop Swain to the contrary notwithstanding. Saw Johnny Brooks yesterday who has returned from Alabama for a while, being full of malaria."-D. W. Sleeper, 141 Mills St., Boston, is a fire insurance inspector with the Underwriters Board of New England.—Ben Pepper and S. L. Burgher also with him.—Sleeper is married and has a son. He is living in Dorchester .- F. M. Loud. 311 Jane St., West Hoboken, N. J., writes that he is still learning the practical end of electric railroading with the Public Service Railway Company.—P. L. Adams is also with the company and Phil Chase is with the affiliated Public Service Electric Company. -G. L. Lawrence is with the W. H. McElwain Company. He is just recovering from an attack of pneumonia and expects to go south to the mountains. He says McCain is in real estate business in Dayton, Ohio, and when last heard of, Pop Swain was still an engineer.-Lincoln Mayo has been enjoying the winter in southern California. He had to give up work in Chicago with D. C. and Wm. B. Jackson about the first of the year on account of ill health. -F. R. Faulkner is at present resident engineer on construction. Kettle River Valley Railway, Westbridge, British Columbia.-W. W. Clifford expected to leave on June 14 for Seattle as hydraulic engineer in the United States Forest Service.-D. G. Haynes, 312 Patent Office, Washington, D. C., says: "Altamirano was in town a couple of weeks ago. He is in electrical engineering for himself in Mexico City.— 'Hulsie Bobsizer' is an embryo patent attorney." -Robert E. Doane writes from 404 Hoffman St., Elmira, N. Y., that "Haylett O'Neill, VI, is married and his wife is the 'finest' from the Pacific Coast, and can cook like a southern mammy. If you don't believe it ask A. J. Barnes."-C. S. Robinson has just taken the position as chemist of the White Lead Works, Sherwin Williams Company, at Chicago, Ill.—Shriefer's card was returned with the information that he is at present in Athasar, Siberia, Russia, and will return about November.—A. B. Morrill writes from Chicago that "Jack Moses is still leading the simple life. Jack says so himself."-Jack writes, "Morrill is going to China this summer to educate the heathen."—Schnieder writes from Topeka that, "It is 97° in the shade."-F. D. Applin is at Fort

Stevens, Ore., and writes that he is having a very good experience as second lieutenant in the Coast Artillery Corps and likes the army life very much.—George T. Palmer is now acting as sanitary inspector in the division of medical and sanitary inspection of the New Jersey State Board of Health.—George Wallis is an instructor of mechanical engineering at the University of Michigan.

## New Addresses

"Chil" Sharp is in Virginia City, Nev.—Andrew J. Menzinsky is at Bularvoya, Rhodesia, South Africa.—Phil Wentworth, Box 27, Reno, Nev.—Kenneth E. Carpenter, 25 St. James Ave., Boston. -M. Terry, 302 Williams St., Flint, Mich.—George W. Bowers, Narrangansett Pier.—B. R. Fuller, Olvas Publicas, Santo Domingo, Dominican Republic, West Indies.—F. H. Remick, 3269 Sansom St., Philadelphia, Pa.—Garret Schenck, Jr., superintendent of Bureau of Economy, Great Northern Paper Company, Millinocket, Me.-Arthur M. Rosenblatt, in care of Western States Gas and Electric Company, Placerville, Cal.-M. K. Weill, Apartado 1238, City of Mexico.-H. O. Jenkins, 176 Cowper St., Palo Alto, Cal.—Charles A. Johnson, Richmond, Staten Island, N. Y.— E. L. P. Treuthardt, United States Food and Drug Inspection Laboratory, 518 Tabor Opera House Bldg., Denver, Col.—Lloyd C. Eddy, Jr., Barrington Center, R. I.—B. A. Robinson, 527 Main St., Malden.—Herbert L. Jenness, 54 Bushnell St., Dorchester.— Harry S. Pardee, 6408 Vernon Ave., Chicago, Ill.—Norman Stubbs, 2897 Kenmore Ave., Chicago, Ill.—Sherman Lougee, in care of C. C. Fuller Company, Hartford, Conn.—H. M. Symons, Laramie, Wis.

#### 1910.

JOHN M. FITZWATER, Sec., 119 Henry Street, Brooklyn, N. Y. G. BERGEN REYNOLDS, Res. Sec., care of W. H. McElwain Co., 348 Congress Street, Boston, Mass.

Edward Stuart's engagement has been announced to Miss Helen L. Fox of Roxbury. Miss Fox is a graduate of Dr. Sargent's training school in Cambridge, class of 1910.—Carroll H. Shaw, who is now in Cleveland, Ohio, has announced his engagement to Miss Natalie Shaw of Kingston, Mass. Miss Shaw is a graduate of Simmons College.—Cards have been received announcing the marriage of Robert F. Burnett, on April 13, to Miss Agnes M. Jones of Chelsea, Mass.

## 1911.

ORVILLE B. DENISON, Sec., 26 Pearl Street, So. Framingham, Mass.

On Tuesday evening, June 6, in Symphony Hall, we were formally admitted into membership in the Alumni Association. Promptly

at 8.20, to the strains of "Up the Street," our class, 200 strong, entered the hall in four columns, the columns being headed by President Stevens, First Marshal Parker, Second Marshal Denison and Third Marshal Salisbury. When the lines met at the center of the floor, "Don" took the lead followed by the rest of the class. Doctor Noves then formally presented the '11 banner to Stevens, just as the orchestra swung into the strains of "Dear Old M. I. T." Following the rendition of this favorite, we scrambled to the tables reserved for us at the front of the hall, and from then on enthusiasm was at fever heat. The gay festivities of senior week were brought to a close by this night at the Pops. All of the events of the week were unusually successful and great credit is due the Class Day Committee of twenty-six, and especially to its chairman, First Marshal Parker, whose untiring efforts made our senior week one long to be remembered by all those who attended. The secretary has as yet been unable to send out return postal cards to all members of the class requesting the business address and occupation of each man, but this will be done as soon as the card catalogue of the class, which is now being finally revised and brought up to date, can be secured from Mr. Humphreys. The miners seem to have been particularly fortunate in securing jobs this year. "Jack" McAllen is to return to the Institute as Professor Richards' private assistant, and Mackenzie also expects to return as a laboratory assistant.—Vining will be assistant chemist at the big smelter at Perth Amboy.-Osborne will be a mill hand at Gowganda, Ont.-Van Syckel has also secured a position as a mill hand, and will locate at Lebanon, Pa.-Whorf is going to work in the smelter at Copper Cliff, Ont.-Emmel contemplates a trip to Alaska. Among the electricals there seem to be but a few favored ones.—Ferris is going into telephone work in New York City, while Shurig will enter the same line of work in Philadelphia.—Darrow will be with the testing department of the Goodyear Rubber Company in Akron, Ohio. His running-mate, "Herb" Fryer, will be in charge of the drafting room at the B. F. Sturtevant Company in Hyde Park.—Alling and Marston are to return to the Institute as laboratory assistants, the former in the standardizing laboratory and the latter in the big laboratory. Gaillard is spending the summer in Europe, and "Dutchy" de Romana also expects to "cross the pond."—Davis contemplates entering the engineering corps of the U.S. army.—"Bill" Denton has got a job in Denver. Lougee and Huxley are going to return to the Institute and study for a master's degree.—"Bill" Shepard is going to Pittsfield in the apprentice department. Most of the other Course VI men are as yet undecided .- "Tunnie" Parker and Morrison expect to return as assistants in Course I next fall. "Ed" Vose can't resist the "call of the wild" and will return as an assistant in Course XI. Incidentally he will probably have something to do with next year's show, but this is purely assumption

on the part of the secretary.—"Jim" Campbell is in New York doing some special railroad valuation work for Professor Swain of Harvard.—"Phil" Caldwell is going with the McElwain Shoe Company.—"Bill" Warner has gone out West rustling for a job. "Dick" Gould, as you all know, is engaged (matrimonially), but as yet the secretary has not learned of any business engagement. "Dick" Ranger is busy keeping the Tech Typewriting Bureau going through the summer.—"Fat" Merrill is busily engaged this summer picking up new railroad experiences with which to bore us at our next reunion. Judging from the large number of men who bravely answered "Pete" White's call for engaged men to step on the platform class day, a regularly edited matrimonial department will soon have to be included with the 1911 notes. secretary hopes that in the November or January issues of the Review he will be able to publish a comprehensive list of the business addresses of the members of the class. This can only be an assured fact, however, through the cooperation of the individual members in promptly answering the cards soon to be sent out. Our class is fortunate in being large, and there is also apparently considerable enthusiasm just now. How long this will last time alone can tell, but certain it is that it can only last by each member of the class taking an individual interest in all class and This interest can be chiefly manifested by re-Institute affairs. turning to class reunions and by corresponding with the secretary, so that through the latter the class can learn collectively of the doings of the individual members. The secretary welcomes correspondence from each and every member of our large class.

Every regular and special member of the class should become identified with the Alumni Association immediately. It is the most effective organization of its kind of all the colleges in the country and has been largely instrumental in bringing about the new condition of things. Every graduate becomes a member on graduation. The dues are one dollar a year and one dollar a year for the Technology Review if the subscriber's dues are paid; Review subscription to non-members of the Alumni Association, one dollar and a half a year. Special students will be admitted to the association on application for membership which should be sent to Walter Humphreys, secretary, M. I. T. There were formerly two classes of members, associate and regular members, special students being eligible to associate membership only. The

John Avery has received the appointment of town engineer from

association has recently abolished this distinction.

the selectmen of Watertown.